

UNITED STATES DISTRICT COURT
WESTERN DISTRICT OF NEW YORK

-----X

CAROL S. MARCELLIN, individually, and as
Co-Administrator of the Estate of Charles
E. Hollowell, deceased, and JESSICA
HOLLOWELL-McKAY, as Co-Administrator of the
Estate of Charles E. Hollowell, deceased,

PLAINTIFFS,

-against- Case No.:
1:21-cv-00704-JLS

HP, INC., and STAPLES, INC.,

DEFENDANTS.

-----X

DATE: March 27, 2025

TIME: 10:08 A.M.

VIRTUAL DEPOSITION of the
Non-Party, JASON T. KARASINSKI, taken by
the Defendant, pursuant to a Court Order
and to the Federal Rules of Civil
Procedure, before Miriam Schweke, a Notary
Public of the State of New York.

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

A P P E A R A N C E S:

FARACI LANGE, LLP
Attorneys for the Plaintiffs
CAROL S. MARCELLIN, individually, and as
Co-Administrator of the Estate of Charles
E. Hollowell, deceased, and JESSICA
HOLLOWELL-McKAY, as Co-Administrator of
the Estate of Charles E. Hollowell,
deceased,
28 East Main Street, Suite 1100
Rochester, New York 14614
BY: STEPHEN SCHWARZ, ESQ.

COUGHLIN & BETKE
Attorneys for the Defendants
HP, INC., and STAPLES, INC.
175 Federal Street, Suite 1450
Boston, Massachusetts 02110
BY: BENJAMIN LEVITES, ESQ.

ALSO PRESENT:
Jaclyn Wanemaker

* * *

1

2 F E D E R A L S T I P U L A T I O N S

3

4

5 IT IS HEREBY STIPULATED AND AGREED by and
6 between the counsel for the respective
7 parties herein that the sealing, filing and
8 certification of the within deposition be
9 waived; that the original of the deposition
10 may be signed and sworn to by the witness
11 before anyone authorized to administer an
12 oath, with the same effect as if signed
13 before a Judge of the Court; that an
14 unsigned copy of the deposition may be used
15 with the same force and effect as if signed
16 by the witness, 30 days after service of
17 the original & 1 copy of same upon counsel
18 for the witness.

19

20 IT IS FURTHER STIPULATED AND AGREED that
21 all objections except as to form, are
22 reserved to the time of trial.

23

24

* * * *

25

1 J. KARASINSKI

2 J A S O N T. K A R A S I N S K I,
3 called as a witness, having been first duly
4 sworn by a Notary Public of the State of
5 New York, was examined and testified as
6 follows:

7 EXAMINATION BY

8 MR. LEVITES:

9 Q. Please state your name for the
10 record.

11 A. Jason T. Karasinski.

12 Q. What is your address?

13 A. 7317 State Route 4, Sodus
14 Point, New York 14555.

15 Q. Mr. Karasinski, we briefly met
16 off the record, my name is Ben Levites, I
17 represent the Defendant Hp and Staples in
18 this case. Also present we have the court
19 reporter. Ms. Schweke and, of course,
20 Attorney Schwarz, I'll be asking you
21 questions of a lawsuit filed by Carol
22 Marcellin and Jessica Hollowell-McKay
23 concerning a fire on January 24, 2020, at
24 the residence of Carol Marcellin and
25 Charles Hollowell and Attorney Schwarz may

1 J. KARASINSKI
2 as well. So my first question for you
3 today, sir, is do you understand we're here
4 today concerning Ms. Marcellin's lawsuit in
5 respect to the fire at her residence on
6 January 24, 2020?

7 A. Yes.

8 MR. LEVITES: Just
9 housekeeping, Steve, do you agree to
10 the ordinary stipulations?

11 MR. SCHWARZ: Yes.

12 MR. LEVITES: And the Zoom
13 stipulations, we're all okay with
14 this proceeding remotely and the oath
15 being sworn remotely?

16 MR. SCHWARZ: Yes.

17 THE WITNESS: As far as
18 stipulations, I want to read and
19 sign, so I don't know if that's your
20 northerly customary stipulations.

21 MR. LEVITES: That was my next
22 question.

23 THE WITNESS: Okay.

24 MR. LEVITES: So please make a
25 note of that, Ms. Schweke.

1 J. KARASINSKI

2 Q. Okay, so you have familiarity
3 with the deposition process?

4 A. Yes, sir.

5 Q. So how many times have you been
6 deposed previously, if you know?

7 A. A lot. I don't remember how
8 many times.

9 Q. More than 50?

10 A. Not more than 50.

11 Q. More than --

12 A. Probably closer -- more than
13 20, yeah.

14 Q. Okay. Yeah, so somewhere
15 between 20 and 50?

16 A. Yeah, that's fine.

17 Q. Okay. So I'll go through these
18 as quickly as we can because you've heard
19 them at least 20 times. The goal today is
20 to produce a transcript that reads question
21 and answer, question and answer and so on.
22 Is that okay?

23 A. Yes.

24 Q. So in a normal conversation I
25 appreciate when you anticipate the rest of

1 J. KARASINSKI

2 my question and normally I would appreciate
3 that, but because we need that transcript
4 to read question and answer, you'll need to
5 allow me to finish asking the question
6 before giving your answer. So if I hold my
7 hand up while asking a question, I'm not
8 trying to be rude, I'm just letting you
9 know I'm still finishing asking the
10 question. Is that okay?

11 A. Yes.

12 Q. Equally, if you're giving an
13 answer, I'll make every effort not to
14 interrupt your answer and begin another
15 question before you finish, and if I do,
16 please let me know that you weren't
17 finished. Is that okay?

18 A. I will.

19 Q. Then this is extra important
20 because we're on Zoom, do you agree not to
21 use your cellphone or any electronic
22 devices during the deposition when we're
23 not on a break?

24 A. Correct.

25 Q. Do you have any notes or

1 J. KARASINSKI

2 documents with you right now?

3 A. I have my report and my
4 rebuttal report --

5 Q. Okay.

6 A. -- and the local Fire Marshal's
7 report.

8 Q. Do you agree not to refer to
9 any notes or documents other than those we
10 review together while we're, you know, in
11 the deposition?

12 A. Correct, yes.

13 Q. Is there anyone else present in
14 the room with you right now?

15 A. No, sir.

16 Q. You've been doing a great job
17 so far but if you continue doing verbal
18 answers because the reporter won't capture
19 that; is that all right?

20 A. Yes.

21 Q. I may ask you a question that's
22 confusing, you can always tell me that you
23 didn't understand it and you'd like me to
24 repeat it or rephrase it, but if you do not
25 tell me that you didn't understand it and

1 J. KARASINSKI

2 then you proceed to answer it, it will be
3 assumed that you did understand the
4 question. Is that okay?

5 A. Yes.

6 Q. We can take a break at any time
7 or for any reason, my only request is that
8 if I just ask you a question that you
9 answer it before we do so. Is that okay?

10 A. Yes.

11 Q. Without telling me the
12 substance of any conversations you might
13 have had with Attorney Schwarz or anyone
14 from his team, what did you do to prepare for
15 today's deposition?

16 A. I reviewed my report, I
17 reviewed my rebuttal and I reviewed the
18 local Fire Marshal's report.

19 Q. Those are the three documents
20 you have with you right now?

21 A. Yes, sir.

22 Q. Did you meet with anyone?

23 A. When? I guess, could you be
24 more specific?

25 Q. In preparation for the

1 J. KARASINSKI

2 deposition, I apologize.

3 A. No, I have not met with
4 anybody.

5 Q. Have you spoken with this case
6 about anyone other than Attorney Schwarz
7 and your colleague, Mr. Litzinger?

8 (Whereupon, an off-the-record
9 discussion was held.)

10 A. I guess we have to repeat the
11 question, there's a lot going on in between
12 there.

13 Q. Yes, I apologize. So my
14 question was, have you spoken with this
15 case about anyone other than Attorney
16 Schwarz and Mr. Litzinger?

17 A. In totally, like, since the
18 date of loss?

19 Q. Yes.

20 A. Talked to the local fire
21 marshals, I've talked to the experts that
22 were on site, obviously I have talked to
23 the experts that Hp sent to my facility for
24 the lab exam. So, yes. I guess the
25 answer's yes.

1 J. KARASINSKI

2 Q. Is there anyone else other than
3 the local fire department, the experts on
4 site at the scene examination and those at
5 the facility for the lab examination?

6 A. Not that I can recall at this
7 point, no.

8 Q. I guess taking each of those
9 groups in turn, do you remember what you
10 spoke to with the local fire department
11 about?

12 A. The local fire department was
13 on site for our joint scene exam.

14 Q. Do you remember what they told
15 you and you told them?

16 A. I believe the investigator's
17 name was Jeff Luckey and he went over his
18 investigation and statements provided by
19 the living occupant, Carol.

20 Q. Then setting aside the experts
21 from Hp, were there any other experts other
22 than Mr. Litzinger and the Hp experts with
23 whom you spoken about this case?

24 A. On site I think you should have
25 a sign-in sheet but I believe there are

1 J. KARASINSKI

2 people there from FFA as well as NEFCO, the
3 local law enforcement was there, the local
4 fire marshal was there, Brent was there for
5 your side at the scene exam.

6 Q. Do you remember what, if any,
7 conversations you had with the
8 investigators from FFA and NEFCO?

9 A. No, we processed the site,
10 everyone agreed on the room of origin,
11 everyone agreed that the ignition source
12 was something to do with a laptop and we
13 collected all that evidence and we left.

14 Q. Okay, did you take any
15 medication today, sir?

16 A. No.

17 Q. Are you able to sit through
18 this deposition and answer questions?

19 A. Yes.

20 Q. I'll make every effort to
21 finish before the end of day but we have
22 a lot of your report to get to, so I'll be as
23 quick as I can.

24 A. No worries. It there was an
25 early morning for me, I'm good.

1 J. KARASINSKI

2 Q. I appreciate that. Yeah, wow,
3 you're on a time difference so thank you
4 for accommodating us.

5 Can you reviews documents if I
6 display them on the screen here?

7 A. Yes.

8 Q. Are you familiar with Hp as a
9 company?

10 A. I'm familiar that they make
11 laptops, other than that, not really, no.

12 Q. Okay. Have you ever had any Hp
13 products yourself?

14 A. Of course, yes.

15 Q. Laptops or something else?

16 A. Laptops.

17 Q. When was the last time you had
18 an Hp product, if you remember?

19 A. We go back and forth between Hp
20 and Dell for laptops for the company but
21 I'm not really sure, I don't remember the
22 last time I had an actual Hp laptop.

23 Q. You're using a Dell now, fair
24 to say?

25 A. I'm using a Dell now, correct.

1 J. KARASINSKI

2 Q. You would agree that part of
3 the scientific method in a case like this
4 is to test the adequacy and accuracy of
5 your hypotheses?

6 A. Yes.

7 Q. Would you agree that the use of
8 an appliance should be well understood
9 before it was identified as the cause of a
10 fire?

11 A. Can you repeat that question,
12 I'm sorry?

13 Q. Yes. Would you agree that the
14 use and operation of an appliance should be
15 well understood before it's identified as
16 the cause of a fire?

17 A. I would agree in part.
18 Sometimes when we look at items we may not
19 know what they are or have never used that
20 item before but after we do our inspection,
21 do our lab exam and forensically, you know,
22 examine the evidence as well as with the
23 X-rays or CTs, that I would have a pretty
24 good understanding on how that piece of
25 equipment operates.

1 J. KARASINSKI

2 Q. So you may not have the
3 understanding and the use in operation
4 and -- of an appliance at the outset of
5 your investigation but you would expect to
6 by the conclusion of your investigation?

7 A. With that and following the
8 scientific method, so we're typically
9 always in the data collection phase,
10 correct, until we develop our hypothesis,
11 test our hypothesis and then select a final
12 hypothesis, yes.

13 Q. Would you agree that the degree
14 of damage to an appliance is not an
15 adequate indication of origin?

16 A. Well, that determines on a
17 couple different factors but that's one
18 factor, but, you know, if you have a fire
19 that originates in appliance, depending on
20 what those secondary field packages are,
21 adjacent to that or near that can change
22 the fire dynamics of that situation. But
23 in part, I would agree with that, yes.

24 Q. And that's because an appliance
25 can be damaged in a fire? In other

1 J. KARASINSKI

2 words --

3 A. Yes.

4 Q. -- damaged instead of causing
5 the fire?

6 A. Yes, in some instances, of
7 course.

8 Q. Okay. Would you say it's more
9 so in instances where an appliance has a
10 field load in it, like a battery pack in a
11 notebook computer?

12 A. I'm not sure I understand your
13 question, can you rephrase it?

14 Q. Sure. So would you agree that
15 in some instances an appliance can be
16 damaged as a result of a fire as opposed to
17 causing the fire, right?

18 A. Yes. My understanding of the
19 question you're asking if an appliance can
20 be damaged from fire attack verses cause,
21 and the answer is yes, yes.

22 Q. So my follow-up question to
23 that is, is it more likely that an
24 appliance -- I'm sorry. Now I'm seeing how
25 I unartfully phrased.

1 J. KARASINSKI

2 And it's consistent with that
3 fact that some appliances have fuel in them
4 and some don't, right?

5 A. I guess you would need to
6 define fuel, I'm not sure what you're
7 asking.

8 Q. Well, a notebook battery pack
9 has fuel for a fire, right?

10 A. Yes.

11 Q. Ms. Marcellin was deposed on
12 July 7, '23 and July 9, '24, correct?

13 A. I believe so, yes.

14 Q. Do you remember when you were
15 retained in this case?

16 A. I'm not sure the exact date
17 that we were contacted, obviously it was
18 post-fire, and it was after the insurance
19 company did initial inspection, I believe
20 NEFCO, because that was the signage on the
21 laptop. At the time of my inspection I'm
22 not sure how long after their inspection
23 when we were retained.

24 Q. But you were retained shortly
25 after the fire and certainly prior to your

1 J. KARASINSKI

2 initial scene examination, right?

3 A. Yes.

4 Q. Did you have any questions that
5 came to mind that weren't answered Ms.
6 Marcillin's depositions that you wanted to
7 ask her?

8 A. Yes.

9 Q. What questions were those?

10 A. Those questions were derived
11 after receiving the reports and my review
12 from Exponent that brought up items that
13 were not asked during those depositions and
14 I wanted to get clarification to those
15 items for a potential rebuttal report.

16 Q. So did you have any questions
17 that came to mind that weren't answered by
18 her depositions prior to your initial
19 report?

20 A. No, not really, actually,
21 because of the conversations that were had
22 on site with the additional experts,
23 everyone was in the agreement on the room
24 of origin, everyone was in agreement what
25 evidence was collected and none of the

1 J. KARASINSKI

2 parties asked for any additional evidence
3 to be collected at the site.

4 Q. So it's because of your
5 conversations with people at the site
6 during your initial exam that you had no
7 additional questions for Ms. Marcellin in
8 respect of her depositions that you wanted
9 to ask her before preparing your October
10 14, '24 report?

11 A. Correct. I didn't have any
12 additional questions until receiving the --
13 again the Exponent reports that brought up
14 issues that I did not address because
15 everyone was in agreement of the area of
16 origin on site so I wanted to get clarity
17 for those questions from Carol in
18 preparation of my rebuttal report.

19 Q. Did you, yourself, ever
20 interview Ms. Marcellin?

21 A. No, I did not interview her
22 personally, based on the evidence and the
23 description from the locals, as well as
24 reviewing the report, I felt that I had
25 enough information at that time but because

1 J. KARASINSKI

2 of some of the instances that Exponent
3 addressed in their report, I wanted to get
4 clarification from Carol on some of those
5 items.

6 Q. So -- but you didn't interview
7 her in respect to creating the supplemental
8 declaration that you're referring to,
9 right?

10 A. I have not interviewed her,
11 I -- I try to respect the attorney/client
12 privilege and I would send in my questions
13 or call and ask them to -- for follow-up
14 questions with her, based on my review and
15 following the scientific method and still
16 continuing to collect that data to follow
17 that scientific method.

18 Q. So is it your ordinary practice
19 not to interview someone like Ms. Marcillin
20 and to forward your inquiries to their
21 counsel in a case such as this?

22 A. Typically when it involves a
23 fatality if they're represented by an
24 attorney I will normally just go through
25 the attorney versus interviewing them just

1 J. KARASINSKI

2 because of emotional state and what they
3 went through. Typically the attorney that
4 they have has a rapport with them and I
5 would go through them to ask those
6 questions of their client or their insured,
7 depending on whom I'm there representing.

8 Q. Does your answer change if it's
9 a case different from this one that doesn't
10 involve a fatality?

11 A. Can you repeat that? I didn't
12 understand that question.

13 Q. Yes. So you said that you
14 normally don't conduct interviews in a case
15 like this that involves a fatality because
16 of the emotional state; is that correct?

17 A. That's correct and also if
18 they're represented by an attorney, then I
19 would go through the attorney. But if
20 they're not represented, then I would
21 interview them, yes.

22 Q. Okay. If it was someone who is
23 represented by an attorney but it wasn't a
24 death case, same answer?

25 A. Same answer, yes.

1 J. KARASINSKI

2 Q. So as long as the person's
3 represented by counsel you're not going to
4 interview?

5 A. Unless the attorney allows it
6 or recommends it. I mean, I've always just
7 gone through the attorney to get my
8 questions answered.

9 Q. Do you know if Attorney Schwarz
10 allowed it or recommended it in this case?

11 A. I've never asked to interview
12 Carol personally.

13 Q. You work for Ms. Marcellin,
14 that's correct?

15 A. I work for Faraci Lange, that's
16 who retained me.

17 Q. As you sit here today are there
18 any questions you would have liked to have
19 ask Ms. Marcellin if you were given the
20 chance?

21 A. Not at this point, maybe during
22 the deposition I may have questions, but at
23 this point, no, I don't have any additional
24 questions for her.

25 Q. Okay. You said you reviewed

1 J. KARASINSKI

2 her witness statement prior to this
3 deposition as well, right?

4 A. Yes.

5 Q. And then you reviewed her first
6 deposition testimony transcript?

7 A. Not in preparation for the
8 deposition, I do not review her
9 depositions, no.

10 Q. But in preparation of your
11 report you reviewed her testimony?

12 A. Yes.

13 Q. Did you review her second
14 deposition transcript?

15 A. Yes.

16 Q. Did you review the Affidavit of
17 the Plaintiff, the Supplemental Declaration
18 that we've been talking about, did you see
19 that?

20 A. Say again.

21 MR. SCHWARZ: You faded out.

22 Q. I'm sorry. I apologize, I'll
23 move a little closer. The Supplemental
24 Declaration we've been talking about, did
25 you review that before Ms. Marcellin

1 J. KARASINSKI

2 executed it?

3 A. I don't know what you mean by
4 executed it.

5 Q. Did you have the opportunity to
6 see a draft of that Affidavit or did you
7 see it after she signed it?

8 A. I believe I saw it after it was
9 signed.

10 Q. Do you know when she signed it?

11 A. I don't recall that, no.

12 Q. I think you described the
13 circumstances of its creation as you had
14 some additional questions that you directed
15 to counsel after receipt of the Exponent
16 reports in this case?

17 A. Yes.

18 Q. So do you understand that
19 Attorney Schwarz interviewed Ms. Marcillin
20 to create that Affidavit?

21 A. Yes, I provided questions to
22 them to ask her after receiving that
23 report, yes.

24 Q. Okay. So other than the
25 witness statement to the local

1 J. KARASINSKI

2 investigators, the deposition transcripts
3 and the Supplemental Declaration, the
4 Affidavit, are you aware of any other
5 statements from Ms. Marcillin that were
6 memorialized?

7 A. I'm not aware of any other
8 witness statements from her other than
9 those.

10 Q. Okay. I think you testified
11 the reason that you never took a statement
12 from her was that the evidence that you had
13 in front of you was sufficient to come to
14 your conclusions in your initial report; is
15 that correct?

16 A. Well, I mean, I reviewed her
17 statement that she provided to the local
18 authorities, and I felt that that was
19 sufficient at that point. But again, I
20 didn't write a report until after the lab
21 exam and the amount of data that was
22 collected to actually form an opinion to
23 follow the scientific method.

24 Q. Understood. So it was the
25 statements that were taken by local

1 J. KARASINSKI

2 investigators, together with the scientific
3 process you followed in the months after
4 your initial scene exam through the
5 laboratory exam and the preparation of your
6 report is the reason why you never took a
7 statement from her?

8 A. Correct, but I reviewed the
9 statements that she gave in her two
10 depositions as well as the interview
11 provided by the local authorities and the
12 follow-up questions I had after receiving
13 the reports that were provided by Exponent.

14 Q. Understood. Do you know if
15 Ms. Marcellin had any issues with respect
16 to her memory?

17 A. I'm not aware of any memory
18 issues from Carol at all.

19 Q. Do you know whether she needed
20 to change her answers in this case
21 previously?

22 MR. SCHWARZ: Object to the
23 form of the question. If you want to
24 tell him what you're talking about, I
25 certainly would think that would be

1 J. KARASINSKI
2 appropriate, but your general
3 statement of changing her answers
4 is -- is inappropriate. And I think
5 what you're referring to is the
6 interrogatory answers which were
7 actually verified by the other
8 Plaintiff, Ms. Hollowell --
9 McKay-Hollowell [sic] not by Carol
10 Marcellin, so you're incorrect in
11 your statement.
12 You can answer the question if you
13 understand it, Jason.

14 Q. Did you understand the
15 question?

16 A. Can you repeat the question?

17 Q. Yes, absolutely. My question
18 was, are you aware whether she needed to
19 change her answers in this case previously?

20 MR. SCHWARZ: Same objection.

21 A. I'm not aware of Carol changing
22 any of her answers in this.

23 Q. Okay. Did you find her
24 statements -- meaning her statements to
25 local investigators, her deposition

1 J. KARASINSKI

2 testimony, and the Supplemental
3 Declaration, did you find them to be
4 consistent with one another?

5 A. From what I reviewed, yeah, I
6 believe they were consistent and they were
7 consistent with what was observed at the
8 fire scene.

9 Q. Okay. So you said from what
10 you reviewed, did you mean you reviewed
11 something less than all of those statements
12 or having reviewed all of the statements
13 you found them to be consistent with one
14 another?

15 A. After reviewing all the
16 statements that I had been provided.

17 Q. You just said you also said
18 found her statements to be consistent with
19 the physical evidence that you
20 investigated?

21 A. I found her statements to be
22 consistent with the physical evidence that
23 was observed at the site, yes.

24 Q. There was nothing that was
25 inconsistent with the physical evidence you

1 J. KARASINSKI

2 found?

3 A. Not that I -- not that I saw at
4 the site, no.

5 Q. Did you find Ms. Marcellin's
6 statements to be credible?

7 A. Yes.

8 Q. Do you have any notes that you
9 prepared in respect of her various
10 statements?

11 A. No. Other than what was
12 provided and was published in my report and
13 rebuttal, no.

14 Q. Understood. I deposed your
15 client Mr. Litzinger and when I asked him
16 that question he testified that the one
17 inconsistency he could think of was that
18 Ms. Marcellin testified that the compact
19 computer was in her closet at the time of
20 the fire but he never saw any indication
21 that the compact was there in the closet or
22 anywhere else during the scene examination.
23 Do you agree with that testimony?

24 A. Yeah, we did not find any
25 physical evidence of a compact computer in

1 J. KARASINSKI

2 the closet, period, as she suggested, as
3 well as a vacuum cleaner that was not in
4 the closet as well.

5 Q. So would that be an
6 inconsistency between her statements and
7 the physical evidence you found?

8 A. I guess your term inconsistency
9 is a little bit extraordinary because I
10 couldn't tell you what is in my closet in
11 my house, so based on her statements to me,
12 it's still consistent. She believed it was
13 there, we didn't find it and the physical
14 evidence doesn't support that.

15 Q. Okay. So but she was quite
16 certain it was there, it wasn't just a
17 belief, right?

18 A. Correct. And I didn't inform
19 her that we didn't find it in there to give
20 her an opportunity to let me know if it's
21 somewhere else in the structure, but the
22 physical evidence and the remains found in
23 the closet area did not support that there
24 was a compact computer there or -- and
25 there was also not a vacuum cleaner in that

1 J. KARASINSKI

2 closet.

3 Q. So you wouldn't call it an
4 inconsistency, is there some other word I
5 can use, you know --

6 A. Well, I guess -- I guess --

7 Q. -- in your testimony in the
8 physical evidence; is that fair?

9 A. I guess -- I think
10 inconsistency is a little bit too strong
11 because, like I said, I don't -- maybe you
12 remember what's in your closet in a room
13 that you never go in anymore but I don't
14 remember what's in my kids' closets or a
15 bedroom that we don't really access
16 anymore. I wouldn't remember what was in
17 that closet, so to me that's -- that's a
18 form of witness statements and the physical
19 evidence shows that it wasn't there and to
20 me that's not an inconsistency, that's just
21 her not recollecting what was in the
22 closet.

23 Q. So I asked you earlier if you
24 knew if she had any troubles with her
25 memory and you were just saying that you

1 J. KARASINSKI

2 wouldn't anticipate or recollect if it was
3 or wasn't in her closet, does that refresh
4 your recollection and your testimony in
5 respect of whether she had any issues with
6 her memory?

7 A. No. Again, I mean, I just --
8 you're having issues with your memory and
9 not remembering what is in a closet, I
10 don't think that's an inconsistency, I
11 think that's just an oversight and she
12 believed it was there and when we didn't
13 find it, it was, okay, it's not in here, so
14 we moved on with our investigation.

15 Q. So with the understanding that
16 you wouldn't characterize this as an
17 inconsistency, did you see anything else
18 like this in the case, meaning,
19 Ms. Marcellin believed it to be one way and
20 you discovered that it was some other way?

21 A. Again, that's following the
22 scientific method and that's, you know,
23 going through interviews and that is a
24 typical oversight that we see regularly
25 when we're doing interviews and we're going

1 J. KARASINSKI

2 through physical evidence that they believe
3 something was there and it wasn't there.

4 Q. My question for you, Mr.

5 Karasinski, is, is there any other
6 oversight like this that you saw in the
7 case?

8 A. Not that I can recall, unless
9 you have something specific you would want
10 to discuss, no.

11 Q. Yeah, so all you can recall
12 sitting here is the vacuum cleaner and the
13 compact as oversight?

14 A. At this point, yes, unless you
15 have something else you want to discuss.

16 Q. Okay. Is there anyone else at
17 FRT that knows anything else about this
18 incident?

19 A. What do you mean if there's
20 anyone else that knows anything about this
21 incident?

22 Q. So you and Mr. Litzinger worked
23 on this case, is there anyone else at FRT
24 that you worked with?

25 A. Well, we have a team of people

1 J. KARASINSKI

2 so there would have been evidence techs
3 there, whoever did the CTs, who did the
4 X-rays, who participated in the joint lab
5 exam. Yeah, so there's -- there's a lot of
6 people that know about this case.

7 Q. Okay. So you have the CT
8 technicians, the joint laboratory exam
9 technicians and then FRT support in respect
10 of preparing the report --

11 A. Yes.

12 Q. -- is that fair to say?

13 A. Yes, that's a fair statement.

14 Q. Is there any overlap between
15 those three general groups of support on
16 your team that I've just laid out?

17 A. I guess define what you mean by
18 overlap.

19 Q. So are some of the people
20 helping on your laboratory exam, are those
21 the same people conducting the CT exam and
22 helping with the preparation of the report
23 or are they three different groups of
24 people?

25 A. Well, based on our lab

1 J. KARASINSKI

2 accreditation with ISO that would be
3 different -- different people, different
4 job descriptions.

5 Q. Okay. So it's a pretty big
6 team that would have helped bring this
7 report together?

8 A. Yes.

9 Q. Ten or 12 people, more?

10 A. Well, when you say put the
11 report together, no, I mean, that would be
12 myself, Andy but we utilize the support
13 staff to take the X-rays, utilize the
14 support staff and the CT technician to take
15 the CT images, and we review those images
16 and then we obviously have evidence techs
17 that sifted the debris that we secured from
18 the site and then we had evidence techs
19 that would assist with the joint lab exam
20 at our facility in Upstate New York.

21 Q. Okay. So you and Mr. Litzinger
22 prepared the report but you had assistance
23 in all of the analysis that you just
24 describe, and my question is, is the total
25 group of people, inclusive of you and Mr.

1 J. KARASINSKI

2 Litzinger, that worked on the science to
3 underwrite the report and the preparation
4 of the report, how many people would you
5 say that is, ten people or more, fewer?

6 A. Probably ten or less, not
7 including whoever reviewed the reports.

8 Q. Okay. If you could just give
9 me a very brief summary of your educational
10 background from high school to your highest
11 level of attainment?

12 A. I have a high school degree
13 from Marion Central School and I have a --
14 I went to Morrisville University for one
15 year and I transferred to Lambuth
16 University where I obtained my four-year
17 degree.

18 Q. What was that degree in?

19 A. That degree was in business, I
20 believe, a minor in marketing.

21 Q. Do you have any licenses or
22 certificates?

23 A. I am a certified fire
24 investigator through IAAI, I'm a certified
25 fire investigator through NAFI, which is

1 J. KARASINSKI

2 the National Association of Fire
3 Investigators and I have multiple PI
4 licenses throughout the country.

5 Q. Are you a professional
6 engineer?

7 A. I am not.

8 Q. Do you have any professional
9 background in computer design?

10 A. I do not.

11 Q. Have you ever been enlisted in
12 the military?

13 A. I have not.

14 Q. Have you ever been involved in
15 a civil lawsuit, meaning personally,
16 meaning someone sued you or you sued them?

17 A. No.

18 Q. How about criminal proceedings,
19 any charges been brought against you?

20 A. No, sir.

21 Q. Any other lawsuits,
22 arbitrations, mediations, again, personal
23 to you?

24 A. No.

25 Q. If you could give me, as you

1 J. KARASINSKI

2 did with your educational experience, a
3 brief summary of your employment experience
4 from the time of your graduation from
5 Lambuth to the present.

6 A. Can we just make my CV an
7 exhibit and go through it? It's not a game
8 of memorization, I don't have that
9 memorized, but --

10 Q. Of course, no. I'm not asking
11 for years and everything like that, if you
12 could just give me a brief summary of how
13 you got to where you are. I don't need to
14 know the month and year you left one
15 position or another or anything like that.

16 A. All right. So I believe I
17 graduated 1995. From there I obtained a
18 job in New Jersey with an insurance company
19 as a property adjuster. From that I took a
20 job at Liberty Mutual in 1998, I believe,
21 and I worked at Liberty Mutual from 1998
22 until I left in 2008. Or, no, I'm sorry,
23 2014, when I was at Liberty Mutual I was a
24 large law specialist and then from there
25 Liberty Mutual sent me to all of my

1 J. KARASINSKI
2 training for fire investigation and I
3 actually received an award at Liberty
4 Mutual for starting their internal fire
5 investigation and when I left I believe I
6 had about 30 employees all over the United
7 States that did fire investigation that
8 reported to myself. And then I opened Fire
9 Research & Technology in 2014 and then
10 that's where we are at today. I have
11 facilities at two labs in Florida -- one in
12 West Palm, one in Sarasota -- and then we
13 have our forensic facility also in Upstate
14 New York and we have approximately, I don't
15 know, 45, 50 employees.

16 Q. Thank you, Mr. Karasinski.

17 MR. LEVITES: I'm just noting
18 for the record we were just joined by
19 my colleague Jackie Wanemaker who is
20 also counsel for the Defendants in
21 this case. She'll be sitting in our
22 deposition for a little bit as her
23 schedule permits.

24 MS. WANEMAKER: Thank you.

25 Good morning, everyone. I'm going to

1 J. KARASINSKI

2 turn off my audio now.

3 Q. So, Mr. Karasinski, have you
4 ever worked in computer manufacturing?

5 A. No, sir.

6 Q. Battery pack design?

7 A. What do you mean by battery
8 pack design?

9 Q. Have you ever worked in battery
10 pack design?

11 A. No, sir.

12 Q. Have you ever worked in battery
13 cell design?

14 A. No, sir.

15 Q. Do you have any background in
16 pack and cell manufacturing?

17 A. When you say -- I guess when
18 you say background it's a little confusing
19 because we look at computers regularly at
20 fire scenes so I'm not --

21 Q. Beyond your experience of
22 examining computers at fire scenes, do you
23 have any professional experience in battery
24 pack and cell manufacturing?

25 A. No.

1 J. KARASINSKI

2 Q. Have you ever written any peer
3 review articles about notebook computers?

4 A. No, not -- not any white
5 papers, no. I have written Power Points
6 that I presented that include battery
7 packs, as well as computers as potential
8 ignition sources but not written any white
9 papers, no.

10 Q. Then same question, have you
11 written any peer review articles concerning
12 lithium ion batteries?

13 A. Power Points only, no white
14 papers.

15 Q. Have you ever been in a
16 notebook computer manufacturing facility?

17 A. No.

18 Q. Have you ever been in a battery
19 manufacturing facility?

20 A. Yes.

21 Q. When was that?

22 A. I've been in multiple for
23 fires, so some in New York, I think I was
24 at a facility in Texas, I think another
25 facility in Florida, but not specifically

1 J. KARASINSKI

2 for Hp. And these were -- I guess let me
3 rephrase that, they were recycling
4 facilities that caught on fire with
5 batteries. That's what they handled was
6 lithium ion batteries.

7 Q. Okay. So you weren't in a
8 battery manufacturing plant but you've been
9 in multiple battery recycling facilities?

10 A. Correct, yes.

11 Q. What did they do at the battery
12 recycling facilities?

13 A. Well, that's an interesting
14 question, Counsellor. They dispose of
15 them, they -- typically it's -- the
16 disposal process is inappropriate but they
17 don't really have guidance on how to
18 properly dispose of them so we see a lot of
19 fires in these recycling plants based on
20 how they store those cells before they are
21 dismantled and put into reproduction and
22 dismantled basically.

23 Q. So you've responded to these
24 fires in these plants because of how the
25 cells are getting stored improperly; is

1 J. KARASINSKI

2 that fair to say?

3 A. Yeah. I mean, a lot of these
4 recycling plants they'll -- they just throw
5 all the cells into dumpsters really, which
6 is obviously a hazard so they have quite a
7 few fires. They try to do what they can
8 with, you know, surveillance video as while
9 as suppression systems above those items
10 but, you know, how they're disposing of
11 them prior to recycling them is -- is
12 definitely an issue that we have run into
13 multiple times in our facility.

14 Q. So tossing the cells in a
15 dumpster, that's dangerous because it's
16 abuse of the cells, right?

17 A. Yeah, correct, and you've
18 got -- you'll have cells that are making
19 connections with other cells that shouldn't
20 be making those connections so you can
21 cause thermal runaway that could cause a --
22 a fire within those dumpsters based on how
23 they're disposing those before they
24 actually recycle them.

25 Q. So they're the physical abuse

1 J. KARASINSKI

2 aspect with the dumpsters that makes it
3 dangerous, right, that's one aspect?

4 A. That's one aspect, yes.

5 Q. Then another aspect that you
6 just mentioned is the possibility for
7 shorting when multiple cells connect with
8 one another in the pile?

9 A. When they come -- when the
10 connections come into contact with each
11 other, yes.

12 Q. Then you talked about the
13 storage conditions generally, are there
14 other aspects of the storage conditions
15 that make it dangerous in a battery
16 recycling facility?

17 A. Yes, the kinds if they're
18 storing them, obviously, inside what those
19 temperatures are, if they're stored outside
20 are those dumpster covered, are they -- are
21 they, you know, available to the elements
22 outside in the weather, the rain, snow,
23 sleet, whatever's going on outside or are
24 they properly covered and staying dry. So
25 there's multiple instances on how those

1 J. KARASINSKI

2 cells are handled and stored that are
3 dangerous, you know, and can cause
4 fire-related issues or thermal runaway and
5 whatever.

6 Q. Understood. So you said that
7 one of the issues you look at is if they're
8 being stored inside, the indoor storage
9 temperature. So how does the indoor
10 storage temperature affect the risk of
11 thermal runaway?

12 A. Can you repeat that?

13 Q. Yeah, not a problem. So you
14 just told me that the -- one of things that
15 you look at in these recycling facility
16 fires if the batteries were stored indoors,
17 what the temperature of the storage was; is
18 that right?

19 A. Well, that's not -- I guess
20 what I'm saying if they're stored inside
21 they're not out in the elements of the
22 weather. You know, if they're inside then
23 you would assume that they had some sort of
24 ambient temperature that they are going to
25 be consistent with, you know, but if

1 J. KARASINSKI

2 they're outside in Upstate New York, if
3 it's in the middle of summer it could be 90
4 degrees, if it's in January there could be
5 3 feet of snow on the ground and it could
6 be minus 20 degrees, so by them storing
7 them in a facility, that ambient
8 temperature would remain consistent.

9 Q. Did you ever have any cases
10 where it was too hot inside the facility,
11 like, they weren't running the air
12 conditioning or something like that?

13 A. No, sir.

14 Q. So you -- in the battery fires
15 that you respond to at these recycling
16 facilities, the indoor air temperature was
17 never a factor in the fire; is that fair to
18 say?

19 A. No, the ambient temperature was
20 not an issue with the fire.

21 Q. Okay. Was it a factor in any
22 of the cases where they were outside, like,
23 when you mentioned maybe it's 90 degrees
24 outside and they're left in a dumpster
25 outside?

1 J. KARASINSKI

2 A. No, I don't -- I don't -- no, I
3 mean, we're not going to get -- we're not
4 going to reach temperatures that would
5 affect, you know, batteries sitting in a
6 dumpster outside, you know, 95 degrees,
7 100 degrees, you know, but the issue is
8 obviously water, when they move the
9 dumpsters obviously the cells move and then
10 they can come in contact with each other,
11 and, you know, through that they can make
12 contact and then go into the thermal
13 runaway based on those connections that
14 they're making as they're moving those
15 dumpsters around the facilities.

16 Q. So the indoor air temperature
17 isn't coming into play in your analysis of
18 the major recycling fires and the outdoor
19 area temperature isn't coming into your
20 analysis of these -- these recycling fires;
21 is that fair to say?

22 A. Yes, that would be fair to say.

23 Q. Okay. Have you ever obtained a
24 patent?

25 A. Have I ever what?

1 J. KARASINSKI

2 Q. Obtained a patent.

3 A. No, I've not obtained any
4 patents.

5 Q. Have you ever been qualified in
6 any court as an expert on human factors?

7 A. Not that I can recall but when
8 we are talking about warnings and
9 fire-related issues, I have to review those
10 to see if those products are being used
11 properly or not, so I have testified to
12 whether they followed the proper use of
13 those as it relate to fire. But
14 specifically been called as a human factors
15 expert, that would be no, but I do review
16 warnings which is part of our process,
17 right, to review to see if that product was
18 being used properly or improperly at the
19 time of the event or prior to the event.

20 Q. Yeah, so you would look at the
21 warnings to determine if product was being
22 misused in your investigation, right?

23 A. That is typical, yes.

24 Q. Did you do that here?

25 A. Yes.

1 J. KARASINSKI

2 Q. Okay. Do you remember what the
3 warnings were in this case?

4 A. Not offhand but we can review
5 them if you want to pull them up and make
6 it an exhibit, but the computer, that was
7 outside of my scope, I was not retained to
8 have any opinions based on the laptop or
9 the failure of the laptop.

10 Q. Okay. But are you offering any
11 opinions on the warnings in this case?

12 A. No, sir.

13 Q. Okay. Do you hold yourself out
14 as an expert on product warnings?

15 A. Well, I guess I review warnings
16 and I testify on warnings and if they were
17 followed, I've not been told I'm not an
18 expert in warnings but we review them --
19 the actual fire-related warnings with that
20 product. We have to review those to see if
21 they were used in the product correctly or
22 not.

23 Q. So I guess it's similar to your
24 answer in respect to human factors, right?
25 You know, your analysis necessarily

1 J. KARASINSKI

2 involves looking at warnings to see if a
3 product was used in a proper way or not,
4 but my question is, have you ever offered
5 an opinion specific to warnings? Have you
6 ever been designated a warnings expert?

7 A. I've not been designated as a
8 warning expert but I given opinions on
9 warnings.

10 Q. Okay. Is there anything in
11 your educational background that
12 particularly qualifies you to testify as an
13 expert in respect to warnings rather than
14 fire investigation?

15 A. Well, I do presentations all
16 over the country and, you know, that's one
17 of the items that we discuss with those
18 Power Points and presentations is to review
19 those warnings to see if that product is
20 being utilized properly, improperly, and we
21 also re-review those warnings, correct to
22 see if there is anything that should be
23 warned for that maybe was not and at that
24 point, you know, based on that, I would
25 give a recommendation to our client that

1 J. KARASINSKI

2 they may need to get a warnings expert.
3 So, you know, what you're looking at --
4 when you're looking at warnings you're
5 also -- you're looking at, okay, has this
6 product been recalled and if so, is that
7 warning lifted, why it's been recalled and
8 is it appropriate.

9 Q. So you said that you would --
10 when you look at whether someone should
11 have been warned but wasn't, you may make a
12 recommendation that a party needs to retain
13 a warnings expert and my question is, did
14 you do so in this case?

15 A. I had not advised the -- my
16 client that we needed to bring on a
17 computer battery expert because that was
18 outside of my scope and what I was asked to
19 do and they retained a computer battery
20 expert. I'm not aware if he has any
21 warnings experience or not.

22 Q. You mentioned whether -- you
23 would look at whether a product's been
24 recalled and whether that's listed in a
25 warning, did you do that in this case?

1 J. KARASINSKI

2 A. Of course.

3 Q. Was this product recalled?

4 A. No.

5 Q. Fair to say you hold yourself
6 as an expert in fire investigation
7 principally?

8 A. Of course, yes.

9 Q. And you're a cause of origin
10 expert?

11 A. Origin and cause, yes.

12 Q. I apologize, origin and cause.

13 A. You got to get them to origin
14 before you get to cause.

15 Q. That does makes sense. So your
16 colleague Mr. Litzinger testified that you
17 analyze fire patterns and fire dynamics; is
18 that fair to say?

19 A. Yes.

20 Q. Okay. How about analyzing
21 notebook computer design, do you do that?

22 A. Again, that was outside the
23 scope of my investigation in this case. I
24 do not analyze any design issues with the
25 computer or the battery manufacturer

1 J. KARASINSKI

2 themselves.

3 Q. You're not a mechanical
4 engineer, right?

5 A. I am not a mechanical -- I'm
6 not a degreed mechanical engineer but we
7 deal with mechanical engineering on a daily
8 basis.

9 Q. Understood. You say you're
10 member of NFPA, that's where you are right
11 now, right?

12 A. I am a member of NFPA, I am
13 a -- I sit on NFPA 921 as a technical
14 member, principal, as I sit as well on NFPA
15 1321 as a technical principal member as
16 well.

17 Q. Are you a member of NAFI as
18 well? I think you said you were, right?

19 A. Yes, NAFI, National Association
20 of Fire Investigators, yes.

21 Q. Have you published any peer
22 review articles on origin and cause of fire
23 of investigations?

24 A. Yes.

25 Q. You would consider the NFPA 921

1 J. KARASINSKI

2 to be the authoritative and accepted guide
3 on the subject of fire investigation,
4 right?

5 A. Yes, I would consider NFPA 921
6 as a guide, yes.

7 Q. Would you consider it as an
8 authoritative and accepted guide?

9 A. Well, it's the best guide that
10 we have right now to follow currently and
11 it's peer reviewed as -- and reviewed by
12 multiple experts all over the country.

13 Q. So is it not authoritative?

14 A. It is authoritative, yes.

15 Q. And is it not accepted?

16 A. It is a generally accepted
17 guide, yes.

18 Q. Okay. So you would say it is
19 authoritative and accepted guide?

20 A. Yes.

21 Q. The same question in respect
22 Kirk's Fire Investigation, would you
23 consider that an authoritative and accepted
24 guide on the subject of fire investigation?

25 A. I would consider that a

1 J. KARASINSKI

2 resource, not a guide.

3 Q. Would you consider it an
4 authoritative and accepted resource?

5 A. I would consider it a resource,
6 not authoritative.

7 Q. So you wouldn't consider Kirk's
8 Fire Investigation to be authoritative?

9 A. I would -- we use that
10 regularly and we use that as a resource
11 when we're investigating fires or we want
12 to research something that we're not aware
13 of or something that might be published.
14 We use a lot of resources. We use Kirk's,
15 we use the Ignition Handbook, we use NFPA
16 921, we use NFPA 1033. There are multiple
17 sources that we use, I don't know that I
18 would call them authoritative, you know I
19 would consider NFPA 921 based on its listed
20 as a guide and I would not -- and I'd say
21 it's advisory, right, you know. If I'm
22 going to go do a room and contents fire I
23 don't need to review the wild lands
24 chapter.

25 Q. Okay. So I understand what

1 J. KARASINSKI

2 you're saying, not every section of every
3 treatise is going to be relevant to your
4 inquiry and perhaps the word authoritative
5 is the reason for your objection to the
6 question. So is it fair to --

7 A. Let's just say advisory, not
8 authoritative, that's all.

9 Q. Is it fair to say that Kirk's
10 is a generally accepted guide or treatise
11 on fire investigation?

12 A. Again, I would say Kirk's is a
13 resource that we use on a regular basis
14 with other resources.

15 Q. But you can't say one way or
16 another what other fire investigators like
17 yourself would consider it to be generally
18 accepted?

19 A. Well, you still have to, you
20 know, analyze what they're saying and
21 whether that's correct or not. I mean,
22 that's why when we talk about 921 as a
23 advisory document, right, that's a peer
24 review document and that goes out to public
25 comments, so anybody that's in fire

1 J. KARASINSKI
2 investigation can make a comment to change
3 something in NFPA 921 or make a correction
4 if something is incorrect, or the amount of
5 testing and forensic science that we do in
6 the field might prove something to be
7 incorrect in 921 or incorrect in Kirk's or
8 incorrect in the Ignition Handbook. So you
9 still have to be able to analyze that data
10 and determine if that's accurate or not,
11 because it may not be accurate and maybe
12 that test has never been completed before
13 and then you do the test and say, okay,
14 that's not correct, right. So and when you
15 have experts and they've never sent in a
16 request or proposal to make a change or
17 send a letter to Kirk's and say I'm not
18 really sure about this statement that
19 you're making here, you know, have you
20 tested this or this and that. So that's
21 why 921 being a guide and advisory and
22 being peer reviewed, that's the best guide
23 that we have in our industry right now to
24 follow and utilize. But, again, that's why
25 I'm here at this meeting, right, in -- on

1 J. KARASINSKI

2 the west coast, we're here to make changes,
3 we're here to review public input, we're
4 here to review what needs to be added or is
5 this incorrect or is this wording
6 incorrect. So to me, that's more important
7 to me than it as a peer reviewed document
8 than you saying that it's authoritative. I
9 would just say it's advisory and we use it
10 as a resource.

11 Q. See, I was trying to back off
12 the word authoritative so I was trying to
13 say generally accepted --

14 A. Oh.

15 Q. -- but I was thinking -- was
16 that okay to use --

17 A. Yeah, generally accepted is
18 fine, but authoritative --

19 Q. So you would say NFPA 921 and
20 Kirk's are generally accepted; is that fair
21 to say?

22 A. That's fair to say.

23 Q. Okay. And I understand your
24 testimony is that fire is an ever evolving
25 field, we know the NFPA is -- you know, and

1 J. KARASINSKI

2 Kirk's are revised on an annual basis and
3 there's -- you know, it's an ever moving
4 target; is that fair to say?

5 A. Yes.

6 Q. Okay.

7 A. I wouldn't say -- I guess I
8 wouldn't say target but we want to make it
9 correct, right, it's not a target but we
10 want it to be accurate.

11 Q. Understood.

12 A. People are utilizing that to
13 follow the scientific method and come to an
14 hypothesis, we need to make sure that we
15 are the most current edition, is the most
16 current in fire signs in what we know know
17 today. And in four years from now what
18 we're working on for the next edition,
19 we're making changes of things that we're
20 finding that are not correct or testing has
21 shown that that statement's not right and
22 we have to revisit that and revise that to
23 the most current fire science-related
24 issues that we have.

25 Q. But now -- and I don't want you

1 J. KARASINSKI
2 to have to do your whole conference
3 presentation right now but is there some
4 subject that is at the forefront this year
5 in respect to revisions? Like, some
6 section of 921 that had been generated the
7 most in discussion, the most comments,
8 anything like that?

9 A. So yesterday we worked on
10 Chapter 29, which is the Marine chapter,
11 that chapter needs a lot of work, and we
12 did a lot of public inputs with that
13 chapter. I was a member of that task
14 group. Yesterday we also did the Vehicle
15 Fire chapter and there were a lot of public
16 inputs on that. And the Vehicle chapter,
17 if you haven't looked at it, doesn't really
18 include a lot of information on electrical
19 vehicles and battery-operated vehicles, so
20 there was a lot of stuff that we're adding
21 as manufacturing changes, right. We go
22 from -- depending who you like, Biden or
23 Trump, are we going to have a gas vehicle
24 or are we going to be required to ride in a
25 battery vehicle. So, you know, as those

1 J. KARASINSKI

2 battery vehicles evolve and change with
3 design and manufacturing, we need to make
4 sure that we stay up on those issues, not
5 only from a fire cause but as well as a
6 safety issue.

7 Q. Are there any revisions or
8 comments that are being contemplated at the
9 conference that pertain to your work in
10 this case -- the reports that you wrote in
11 this case?

12 A. No, not that I'm aware of.

13 Q. So you're not aware of any of
14 the sections that you cite are currently
15 under discussion for revision?

16 A. Well, we're in the public input
17 stage --

18 Q. Okay.

19 A. -- right now so we're making --
20 the committee is reviewing those public
21 inputs and either approving those public
22 inputs to be added into NFPA 921 or to make
23 those changes and then that will go back
24 out for public comment once we either
25 approve or do not approve or reject a

1 J. KARASINSKI
2 public input and then those individuals
3 that supplied that public input, they have
4 an opportunity then to comment back on us
5 if maybe we didn't under what their public
6 input comment would be. So as it pertains
7 to this case, I am not down there so we
8 have not done -- I am the task group chair
9 for the electrical chapter, as well as the
10 arc mapping chapter, which is Chapter 6,
11 Fire Patterns, but we have not gotten to
12 those sections yet so I'm not aware of what
13 those public inputs would be because I'm
14 not sitting down there at this point.

15 Q. Okay. Yeah, I appreciate that.
16 Only reason I ask is you cite all the
17 various sections in the NFPA, obviously
18 you're siting the most recent version so if
19 one of these were to be, you know,
20 currently being revised, it might be
21 relevant to your report. But your
22 testimony today is that the public comment
23 section of the conference is still going on
24 so you don't even know what the changes
25 might be being suggested, contemplated

1 J. KARASINSKI

2 until you get to that -- to the point where
3 they've all been received; is that fair to
4 say?

5 A. Correct, and this meeting goes
6 through Friday so lots for us to review.

7 Q. I'm going to put up as
8 Exhibit 1 your report in this case.

9 (Whereupon, October 14, 2024,
10 report was marked as Defendant's
11 Exhibit 1 for identification as of
12 this date by the Reporter.)

13 Q. Can you see that, Mr.
14 Karasinski?

15 A. I can. Can you make it bigger
16 on your screen or can I look at my paper
17 copy here?

18 Q. Yeah, and you can feel free to
19 look at your paper copy at any time. Is
20 this better?

21 A. Oh, that's better, yeah. No,
22 that's fine.

23 Q. Everything is blown up, like, I
24 only have four lines on here at a time.

25 Okay, so I've marked as

1 J. KARASINSKI

2 Exhibit 1 your expert disclosure which
3 comprises your report in this matter,
4 together with your CV and references and I
5 believe you said you have this document
6 with you right now?

7 A. Yeah, I have the paper copy,
8 yes. And I have that paper copy of my CV
9 with me that you'll have to put that up on
10 the screen.

11 Q. Okay. So the report that I
12 have put up on the screen here, is that
13 your October 14, '24 report in this case?

14 A. Can you just scroll down, I
15 only see --

16 Q. Yeah, sure. I'm just going to
17 scroll down a little bit and tell me to go
18 faster or slower.

19 A. Oh, actually scroll up, you
20 mentioned the date, I just wanted to verify
21 that date.

22 Q. Okay.

23 A. Yeah, I'm good. That is my
24 report, yes.

25 Q. So for our purposes if we refer

1 J. KARASINSKI

2 to your report, it's going to be the one
3 we've marked as Exhibit 1, your October 14,
4 '24 report, okay?

5 A. Yes.

6 Q. I'm going to mark as Exhibit 2
7 your rebuttal report.

8 (Whereupon, rebuttal report was
9 marked as Defendant's Exhibit 2 for
10 identification as of this date by the
11 Reporter.)

12 A. Okay.

13 Q. Dated December 31, '24. Do you
14 see that?

15 A. Yes.

16 Q. So is this your December 31,
17 '24 rebuttal report?

18 A. Appears so, yes. Without
19 reviewing the entire document, yes.

20 Q. So if we refer to the rebuttal
21 report it's going to be the one we just
22 identified here as Exhibit 2, is your
23 December 31, '24 report. Okay?

24 A. Okay.

25 Q. Did you do any work of

1 J. KARASINSKI

2 significance that is not reflected in the
3 two reports we've marked as 1 and 2?

4 A. I guess I don't know what you
5 mean by significance.

6 Q. Significant to your opinions.

7 A. No. Not significant, no.

8 Q. Did you incur any expenses of
9 significance that are not reflected in your
10 billing records?

11 A. Our billing records should be
12 up to date except for my prep time and my
13 depo time today that gets invoiced to you.

14 Q. Did you incur any expenses that
15 you know of in this case beyond your time
16 and things of that nature?

17 A. I mean, when you say expenses,
18 yeah, I mean, we bought totes and things of
19 that nature to collect the evidence, so I
20 have expenses on the case that I've been
21 reimbursed for.

22 Q. Yeah, that's my question. So
23 we're talking evidence collection
24 materials, did you pay any lab fees?

25 A. Well, I own the lab so there

1 J. KARASINSKI

2 are no lab fees.

3 Q. Did you pay -- was there any
4 other travel expenses or anything like
5 that?

6 A. Just to go back and forth to
7 the scene and back. No, otherwise I have
8 not had to travel for this. I guess the
9 only expense, we did not have a CT at the
10 time of this loss back in 2020 so I would
11 have had that expense to send that out to a
12 company to have the computer CT'd, so that
13 would be an expense. But we have our own
14 CT now in-house so that wouldn't be an
15 expense moving forward.

16 Q. Okay. I'm going to put your
17 report back up and we'll go to your CV
18 here. Going back to Exhibit 1 and turning
19 to page 51 of your report, which is the
20 beginning of your CV. Do you see that Mr.
21 Karasinski?

22 A. Yes.

23 Q. Okay. So your CV is beginning
24 on page 51 and it goes -- I'll scroll down
25 to the bottom just so you can see where it

1 J. KARASINSKI

2 ends on page 64. So with the understanding
3 that this was your CV as of October 14,
4 '24, was it current as of that date?

5 A. At the time I wrote the report
6 it was current, but I believe you were sent
7 the most updated version of my CV
8 yesterday.

9 Q. Okay.

10 A. As of Monday of this week.

11 Q. I don't know if I have that.
12 Well, we'll take a look on our next break.

13 MR. SCHWARZ: I e-mailed it to
14 you yesterday.

15 MR. LEVITES: Must missed that,
16 Steve. I'll take a look.

17 Q. But before we look to the
18 updated CV, do you know off the top of your
19 head is there any meaningful updates
20 between October 14th and now?

21 A. No, it would just be training
22 or if I presented a class.

23 Q. Okay. Then you have at page 53
24 of your report it begins a list of
25 testimony, it continues through to page 54.

1 J. KARASINSKI

2 Do you see that, Mr. Karasinski?

3 A. Yes.

4 Q. So looking at this list, do you
5 know how many of these cases you were
6 retained on behalf of the plaintiff?

7 A. You mean Firachi Lane
8 (phonetic) or just in general plaintiff
9 versus defendant?

10 Q. Just in general, plaintiff
11 versus defense.

12 A. Okay. Well, some of them are
13 actually criminal cases too, so ...

14 Q. Okay. So --

15 A. We handle first-party plaintiff
16 and we handle defense, we're probably 60/40
17 plaintiff work versus defense work, and
18 when I say plaintiff work, that's
19 subrogation as well, right, not like
20 personal injury cases.

21 Q. Understood. Do you do more
22 subrogation or personal injury when -- in
23 respect of the -- your consulting?

24 A. I would say we're probably
25 60 percent subrogation plaintiff work and

1 J. KARASINSKI

2 the other 40 percent is defense work. We
3 represent multiple manufacturers
4 countrywide.

5 Q. On your list of testimony here,
6 are any of these active matters?

7 A. You're kind of scrolling a
8 little fast for me, hold on. What page is
9 that?

10 Q. I'm sorry.

11 A. No, that's all right.

12 Q. It's page --

13 A. I'm not a fast reader.

14 Q. -- 54 and this -- I can show
15 you what's here on the screen now is all of
16 the cases on page 54 and then there's just
17 one extra one on the bottom page 53. So
18 I'll just leave this page 54 up so you can
19 see all of these cases.

20 A. Yeah, I believe that the last
21 case that I just -- yeah, that one. I
22 believe that one has settled so I think all
23 these are closed matters.

24 Q. Okay. So the only one that
25 might have been active is this EDNY case

1 J. KARASINSKI

2 ending 5/21 but you believe that I recently
3 settled?

4 A. Yes, I believe that settled.

5 Q. Could you briefly give me a
6 summary of what products -- in the cases
7 that involve products here, which products
8 were involved?

9 A. So the one that just settled
10 that involved a FPDU -- and if you don't
11 know what that is, that is a -- that is
12 what you all calls a outlet that has USB
13 ports in your furniture is called an FPDU.
14 Yeah, I've testified on arson cases, I've
15 testified in criminal cases, I've testified
16 at Grand Jury.

17 Q. So you mentioned one case
18 involved FPDU and then you had some cases
19 that involve intentionally set fires, were
20 any of the other cases on this list involve
21 products?

22 A. Well, yeah, I mean, if we're --
23 if it's a subrogation case then we're
24 obviously looking either at a product or a
25 person that may have been at fault for

1 J. KARASINSKI

2 causing the fire, whether it's, you know, a
3 contractor or subcontractor or potential
4 product failure.

5 Q. Do any other products jump to
6 mind from this list or would you need to go
7 back to your --

8 A. I would -- yeah, I would have
9 to go back to the files. I know the one --
10 the federal court in Kentucky, that was a
11 vehicle electrical fire. I recently
12 testified in Buffalo, New York, that's on
13 there too. That was a big steel factory
14 fire that occurred in Buffalo, but I would
15 have to go back and look. The state of
16 Illinois, I think that was a dust
17 explosion. County of Onondaga, I believe
18 that was an arson case that I testified to.
19 The rest I would have to look, I'm sorry.

20 Q. Oh, no, thank you for going
21 back pretty far from memory. And again,
22 with the understanding that you may have to
23 look back at your records to give a
24 definitive answer, do you know if any of
25 these cases involve notebook batteries?

1 J. KARASINSKI

2 A. No, none of these cases involve
3 notebook batteries.

4 Q. How about lithium ion
5 batteries?

6 A. Yes, I have testified on cases
7 with lithium ion batteries.

8 Q. Which of the cases was lithium
9 ion battery case?

10 A. The New Hampshire case
11 involved a -- and I think I'm under a
12 confidential agreement because it settled,
13 so I just won't say the product name, but
14 that was a torpedo heater that was both you
15 could plug in or have batteries that would
16 run the torpedo heater.

17 Q. Okay. That had 18650 cells?

18 A. Yes, you would be able to plug
19 in a battery pack to that unit to run it
20 that would involve -- that is energized by
21 18650s if you're not utilizing the power
22 from an structure to energize it.

23 Q. Was it your opinion in that
24 case that the torpedo heater failed and
25 caused a fire?

1 J. KARASINSKI

2 A. It was, yes. Well, let's
3 rephrase that. When you say failed, that
4 product -- again, reviewing warnings -- was
5 recalled because the product when you have
6 lithium ion batteries in it and you set the
7 thermostat, that product could -- that
8 torpedo heater could come on when people
9 were not present. So you could walk by
10 that product and think it's off, because
11 it's not running, but the thermostat would
12 be set and if you had -- if you were
13 energizing that unit with the batteries,
14 that thermostat could call for that unit to
15 turn on when you're not there, when the
16 thermostat calls for heat was the actual
17 recall.

18 Q. So essentially the torpedo
19 heater was kicking on unattended and that
20 was the --

21 A. Yes.

22 Q. -- that was what started the
23 fire?

24 A. Yes.

25 Q. Okay. So it wasn't a thermal

1 J. KARASINSKI

2 runaway of the --

3 A. Of the cells, no, no, no.

4 Q. It was the recall, the reason
5 for the recall was the reason for the fire?

6 A. Yes.

7 Q. In all these cases, did you
8 render a formal written report in all of
9 them?

10 A. I would say yes. I wouldn't
11 have written a report, like, for testifying
12 at a Grand Jury hearing or a criminal case.

13 Q. Understood.

14 A. Yeah, okay.

15 Q. All the civil matters in your
16 report would have been anticipated, it's
17 fair to say that you prepared a report in
18 those cases?

19 A. Yes, I would have authored a
20 report, yes.

21 Q. Okay. Was there any case in
22 which you concluded the building electrical
23 system was the cause of the fire --

24 A. Oh, of course.

25 Q. -- among these cases here?

1 J. KARASINSKI

2 A. Among these cases here I don't
3 think any of them were structural
4 electrical causes.

5 Q. So when you say that you had
6 concluded the building electrical system
7 caused the fire in previous instances are
8 you referring to your work back in Liberty?

9 A. Well, no, our office -- our
10 firm gets anywhere from 900 to 1,200 cases
11 a year, so we deal with electrical issues
12 pretty much on a weekly basis. Just if
13 you're asking on these specific cases that
14 I testified in court or written a report,
15 are any of these due to electrical issues,
16 I'm not aware without reviewing all of
17 them, but we deal with electrical issues on
18 a weekly basis on other fires.

19 Q. So you have concluded that in
20 other cases that the cause of fire was the
21 building electrical system but you can't
22 say without going through your files
23 whether any of these cases listed here that
24 was the case?

25 A. That would be a fair statement,

1 J. KARASINSKI

2 yes.

3 MS. LEVITES: We do have the
4 video backup right, Ms. Schweke?

5 THE REPORTER: Yes.

6 MR. LEVITES: Okay, if we could
7 just refer to that for all but the
8 most critical questions that would be
9 very helpful because I know that Mr.
10 Karasinski has a very busy week and
11 we have a lot of his reports to go
12 through so I'd appreciate that.

13 Q. So I think I still have your CV
14 up here. You already told me, I think,
15 that there's nothing significant since the
16 date of this CV in October of '24 except
17 perhaps some presentations or instructions
18 you presented?

19 A. Presentations or if I attended
20 a seminar, yes.

21 Q. Right. Is there anything in
22 this CV that you -- as you sit here today
23 that you know is either inaccurate or
24 incorrect that you'd like to clarify?

25 A. Not that I'm aware of, no.

1 J. KARASINSKI

2 Q. Is there anything you consider
3 of import or significance the opinions you
4 rendered in this case that's not in your
5 CV?

6 A. Not that I'm aware of, no.

7 Q. Do you know how much you've
8 billed to date on the file?

9 A. Oh, Counsel, I have no idea.

10 Q. Do you know how many hours
11 you've worked?

12 A. No, I've not reviewed any
13 billing, I don't handle billing.

14 Q. Would you say it's more than
15 20 hours?

16 A. Oh, absolutely. Since 2020,
17 yes.

18 Q. More than 50?

19 A. I would say you're probably
20 getting close.

21 Q. Okay. So around 50; is that
22 fair to say?

23 A. That would be an estimate.

24 Q. That would be an estimate with
25 understanding you don't have your bills in

1 J. KARASINSKI

2 front of you?

3 A. Yes.

4 Q. Without telling me the
5 specifics of how you came to be retained by
6 Attorney Schwarz and his firm, could you
7 just tell me generally were you contacted
8 directly by his office, were you referred
9 by someone else, was there some other way
10 that you came to be retained in this case?

11 A. I have been doing work for
12 Faraci Lange for several years, not a lot
13 of work, maybe one assignment maybe a year,
14 maybe two, so it's not a big client but we
15 do handle their work.

16 Q. You would typically get
17 outreach directly from the firm because you
18 worked for them in the past?

19 A. Yes. On this case Matt
20 Belanger is the one that contacted myself
21 to see if I could assist with the fire
22 investigation in this matter.

23 Q. You said you worked with Faraci
24 Lange one or two cases a year over the last
25 four or five years was it?

1 J. KARASINSKI

2 A. Yeah, I would say that's a fair
3 statement. I don't know how long but we --
4 I mean 2020, so that's five years, so I
5 would say we started maybe six or
6 seven years. Probably handled maybe five
7 to seven cases for them in total.

8 Q. Did any of those cases involve
9 notebook computers other than this one?

10 A. I don't think so, no.

11 Q. Lithium ion batteries, do any
12 of those cases involve lithium ion
13 batteries?

14 A. I don't recall if any of them
15 involved lithium ion batteries. We just --
16 we handle so many -- I mean, you see it on
17 the news, lithium ion batteries get blamed
18 for a lot of stuff so I don't recall if we
19 handled any lithium ion battery losses for
20 them, except for this case.

21 Q. Then we talked about -- we went
22 through your list of cases, were the ones
23 that you were able to recall the products,
24 were any of those Faraci Lange cases?

25 A. Can you repeat that question,

1 J. KARASINSKI

2 I'm sorry?

3 Q. Yes. So we looked at your
4 active list of testimony at page 53 and 54
5 here and you were able to recall a few of
6 the products that were involved and my
7 question is, for those cases, which I
8 believe there was the torpedo heater, there
9 was the vehicle electrical fire, there's a
10 dust explosion, arson case and the steel
11 factory fire and an FPDU case, so among
12 those cases, do you remember if any of them
13 were for Faraci Lange?

14 A. No, none of those cases were
15 for Faraci Lange.

16 Q. Sorry, go ahead.

17 A. No, none of those cases as it
18 pertains to my expert testimony, none of
19 those cases were for Faraci Lange.

20 Q. Do you remember what the
21 product were in those other five or
22 six cases you worked with Faraci on?

23 A. Oh, I have a current explosion
24 case for them, I've handled a space heater
25 fire case from them that settled where

1 J. KARASINSKI

2 there were multiple fatalities, handled a
3 lawnmower case for them. I think that's
4 it. And then this case.

5 Q. Okay. So explosion case in
6 that one, you don't know what caused it
7 yet, fair to say?

8 A. We haven't finished our scene
9 exam yet, we were waiting for the snow to
10 melt.

11 Q. Okay. Then there's the space
12 heater case and the lawnmower case and you
13 can't remember any others other than that?

14 A. Not off -- no, not off the top
15 of my head.

16 Q. So we have up here your report
17 marked as Exhibit 1, we have your rebuttal
18 that we marked as Exhibit 2, are there any
19 other reports out there that set forth your
20 opinions or findings that are supplemental
21 or different from these reports?

22 A. No.

23 Q. Maybe this is a good time to
24 take a break, we've been going for
25 90 minutes.

1 J. KARASINSKI

2 A. Sounds good to me, I was just
3 going to ask for a break.

4 (Whereupon, a break was taken.)

5 Q. So, Mr. Karasinski, I'm going
6 to turn to page 47 of your report, as I
7 indicated previously, you're free to follow
8 along on your paper copy if that's better.
9 I'm going to try to blow this up so you can
10 see everything.

11 A. Okay.

12 Q. So you see they're a section
13 that begins Conclusion, there?

14 A. Yes.

15 Q. Then there's three paragraphs
16 that follow there. Is it fair to say that
17 these three paragraphs represent summary of
18 your opinions in this case?

19 A. Just let me read it real quick,
20 sorry.

21 Q. Yes.

22 A. Yes, that's a fair statement,
23 that's a summary.

24 Q. Okay. Do you have any opinions
25 of significance that are not summarized on

1 J. KARASINSKI

2 pages 47 and 48 there?

3 A. I do not know.

4 Q. Did you do any work of
5 significance in reaching your opinions on
6 pages 47, 48 that isn't reflected your
7 report?

8 A. Can you repeat that question?
9 I'm sorry, I was trying to put this back in
10 order and I couldn't hear.

11 Q. No problem. My question is,
12 did you do any work with any significance
13 in reaching your opinions on pages 47 and
14 48 that are not reflected in your report?

15 A. No, not of significance, no.

16 Q. Now, you understand that the
17 notebook at issue is a Hp Pavilion Dv6,
18 correct?

19 A. I don't recall the model but I
20 know it was an Hp Pavilion.

21 Q. Okay. So you understand it to
22 be an Hp Pavilion at least?

23 A. Yes.

24 Q. So for ease of reference today
25 when I talk about the Pavilion, I'm going

1 J. KARASINSKI

2 to be referring to the model of the
3 computer and when I refer to the Marcillin
4 notebook, the one that she had, I'm going
5 to call that the Marcellin notebook. Is
6 that okay?

7 A. Okay.

8 Q. With respect to the Marcellin
9 notebook, do you know when it was
10 manufactured?

11 A. When you say the notebook, is
12 that the one that she claimed was in
13 storage in the closet?

14 Q. No, the Marcellin notebook
15 meaning the Pavilion notebook that she had.

16 A. I don't know -- I don't know
17 how long she had that, I don't recall.

18 Q. Okay.

19 A. It maybe somewhere in my notes.

20 Q. If I told you it was
21 manufactured in December 2010, does that
22 refresh your recollection at all?

23 A. That sounds about right.

24 Q. The materials you reviewed in
25 your report are listed here at page 2.

1 J. KARASINSKI

2 A. Okay.

3 Q. Is that correct?

4 A. That's correct, yes.

5 Q. Then you have scientific
6 references here at page 50?

7 A. Yes.

8 Q. Is there anything you reviewed
9 in preparation of your report here marked
10 as Exhibit 1 that's not referenced on
11 pages 2 and 50 in your report?

12 A. No.

13 Q. You state in page 2 that you
14 examined -- you personally examined the
15 scene on February 27, 2020; is that
16 correct?

17 A. It appears that way, yes.

18 Q. Do you remember doing that?

19 A. Yeah, you have at the scene. I
20 don't remember the exact date about if it's
21 2/27/20 it should be accurate.

22 Q. You know it just occurs to me
23 that the world changed pretty dramatically
24 shortly after this exam, didn't it?

25 A. Actually, it was right in the

1 J. KARASINSKI

2 middle of this exam, it was COVID, yeah.

3 Q. So you were already masking up
4 at the exam or at least thinking about it
5 perhaps?

6 A. Yeah, I think New York was
7 still essentially shut down per our
8 wonderful governor.

9 Q. Wow. So what generally did you
10 do during that examination? I know there
11 were a lot of people but what were your
12 activities in the general manner?

13 A. So when we got there initially
14 when we do our joint scene exams we'll go
15 through and give a background, that
16 background was actually given by Jeff
17 Luckey, the local fire investigator, and
18 then the other investigator that was there
19 from NEFCO, I believe, Brian is his first
20 name, I don't remember his last name but it
21 would be on the sign-in sheet, gave his
22 background because he did his initial exam
23 before the parties were put on notice. And
24 then after that takes place we -- at that
25 point Greg Gorbit [phonetic], who was there

1 J. KARASINSKI
2 for you all, requested that he be able to
3 do a Matterport. While Greg was doing his
4 Matterport everyone else went along with
5 their business and did their exterior
6 photos and inspection and then we waited
7 for Greg to finish. Once Greg was done
8 doing his Matterport scan of the structure,
9 then all parties were allowed back into the
10 property to get their overall photographs
11 of the interior of the structure, and then
12 once everyone was done with the interior of
13 the structure, we would then reconvene back
14 outside and give a brief description on the
15 next steps on how we were going to handle
16 the removal process of any evidence, as
17 well once we did that, we went back in. At
18 that point all parties agreed that the room
19 of origin was the office so we processed
20 the evidence in the office space with photo
21 documentation, as well as evidence tents
22 for collection, we collected that evidence,
23 we traced circuits to identify which
24 breaker was tripped in the panel box within
25 the structure, we packaged the evidence.

1 J. KARASINSKI

2 Greg did ask that we lay out the evidence
3 in the garage for him to take better
4 photographs of, we did that for Greg, and
5 we collected the evidence and we left, and
6 then we attended a future lab exam at our
7 facility in Sodus Point, New York, at a
8 later date.

9 Q. So that was a very helpful
10 summary, thank you for that, Mr.
11 Karasinski.

12 Now, did you perform any tests
13 in arriving at your conclusions in
14 preparing this report?

15 A. I guess what do you mean by
16 tests?

17 Q. Did you personally test
18 anything?

19 A. At the scene or just do you
20 mean in general?

21 Q. At the scene or in general.

22 A. Still at the scene? I'm sorry,
23 I didn't know if we were still at the scene
24 or at the lab exam.

25 Q. Either.

1 J. KARASINSKI

2 A. Yeah, so I mean tests are
3 completed throughout the entire thing. I
4 would consider using a meter to test to
5 determine what breaker it is, so we tested
6 that at the scene. I would consider that
7 nondestructive, we're not manipulating
8 anything. And then any testing we did with
9 the Keyence, CT and then, you know,
10 anything that involved after the testing of
11 the laptop, again, that was outside the
12 scope of my investigation, that's not why I
13 have retained, so ...

14 Q. Sorry, you said Keyence?

15 A. Keyence is 3D microscopy.

16 Q. Okay. So you used a meter at
17 the scene on the breaker, you did the 3D
18 microscopy and you did the CT scan, is that
19 fair to say that comprises the tests you
20 did --

21 A. Yes, we did CT -- we did CT
22 scanning as well as X-rays, so I would
23 consider all that testing.

24 Q. Yes. X-rays are certainly
25 testing as well, right?

1 J. KARASINSKI

2 A. I'm sorry, say again?

3 Q. I said X-rays are certainly
4 testing as well, correct?

5 A. Yes, yes.

6 Q. Okay. So we had the meter at
7 the scene, 3D microscopy, the CT and the
8 X-rays, were there any other tests that you
9 did?

10 A. I'm not the aware of what other
11 testing they may or may not have done with
12 the laptop at the lab exam. They may have
13 taken voltage readings of any remaining
14 cells and things of that nature, but again,
15 that was not -- that's not -- was outside
16 my scope so ...

17 Q. Are you familiar with Linden's
18 Handbook of Batteries?

19 A. What did you say, Linden?

20 Q. Linden's Handbook of Batteries?

21 A. I'm not familiar with that.

22 Q. Did you do any battery failure
23 analysis in this case?

24 A. Again, that was outside my
25 scope, Counselor, I didn't do any of the

1 J. KARASINSKI

2 battery or computer testing whatsoever.

3 Q. Okay. That would have been Dr.
4 Martin?

5 A. That would have been Steve
6 Martin, yes/

7 Q. What's a counterfeit battery
8 pack to you?

9 A. Non-OEM battery pack.

10 Q. Is there any distinction
11 between a non-OEM battery pack --

12 A. Well, to me an OEM battery pack
13 I would define that as approved and
14 manufactured by the manufacturer of the
15 actual item that it's being used it.

16 Q. Okay.

17 A. So if it was purchased and it's
18 knockoff non-OEM I would say then that's a
19 subsequent non-OEM battery that was
20 purchase from another entity.

21 Q. Is there any distinction in
22 your mind between an unauthorized battery
23 and a counterfeit battery?

24 A. Not in my mind, no, but again,
25 that's outside my scope. That probably be

1 J. KARASINSKI

2 a better question for Mr. Martin.

3 Q. As of the date of your
4 laboratory exam in October 2020, were you
5 aware that the cells in the Marcellin were
6 not original to her Hp product?

7 A. I believe we were under the
8 impression at the scene exam that it may
9 not have an OEM battery pack but we had no
10 receipt to the confirm that so we
11 weren't -- I don't think we were able --
12 when I say we, when the lab inspection
13 occurred, I don't think we were for sure
14 yet or could make that opinion, but at the
15 lab exam I think it was determined by all
16 parties that it was a non-OEM battery pack.

17 Q. So at least by the day after
18 the laboratory exam, October 27, 2020, you
19 came to understand at least by that date
20 the cells on the Marcellin notebook at the
21 time of the fire were not original to her
22 Hp product?

23 A. Yes, that's a fair statement.
24 I think that based on the assistance from
25 the Hp expert that was on site, as well as

1 J. KARASINSKI

2 the other battery expert that was at the
3 inspection -- at the lab inspection, I
4 believe they were able to make that
5 determination. Or confirm it I guess would
6 be a better word.

7 Q. Would you agree that at the
8 time of the fire Ms. Marcellin's notebook
9 was not in the configuration that it was an
10 originally sold to her?

11 A. You're going to have to
12 rephrase that. I don't know what you mean
13 by configuration. Configurations meaning
14 how it's sitting on the armoire or the
15 desk?

16 Q. Okay, yes, I meant --
17 absolutely. I mean configuration in the
18 sense that, you know, the installed
19 components and the like.

20 A. We were under the impression
21 that she believed she purchased a battery
22 for it, but at that point we did not have
23 the receipt or know if that battery was
24 actually in that laptop until the lab exam.

25 Q. But as you sit here today you

1 J. KARASINSKI

2 agree that the laptop at the time of the
3 fire was not in the condition it was
4 originally sold?

5 A. With a replacement battery,
6 yes.

7 Q. Do you have any knowledge about
8 any other alterations that might have been
9 made to the computer from the time it was
10 made by Hp to the time of the fire?

11 A. I have no knowledge of any
12 alterations except for the replaced
13 battery.

14 Q. Did you do anything to
15 ascertain if there are any other
16 alterations?

17 A. That would be a question for
18 Mr. Martin.

19 Q. Ms. Marcellin stated she never
20 replaced the battery, right?

21 A. Well, when you say, like, her,
22 like, physically replacing it or you mean
23 purchasing it? Yeah, I don't know actually
24 put the battery back in to the laptop. I'm
25 assuming it was her but I don't know who

1 J. KARASINSKI

2 did that.

3 Q. But you didn't ask her, right?

4 A. Well, we asked -- the local
5 investigator asked her, he's the one that
6 advised that she believed that she
7 purchased a new battery or for it, but
8 again, we weren't able to confirm that
9 until we actually removed the battery from
10 the unit in question at the lab exam.

11 Q. Do you know if the Pavilion was
12 UL listed?

13 A. I would have to go back to my
14 photographs to look at the stickers.

15 Q. Well, what is a UL listing?

16 A. Underwriters Laboratories, that
17 it meets United States government
18 qualifications and safety recommendations
19 and things of that nature.

20 Q. Do you what UL standards govern
21 consumer electronics like the Pavilion?

22 A. Which standards, I don't recall
23 which ones exactly, no.

24 Q. Do you recall if the battery
25 pack that was original to the Marcellin

1 J. KARASINSKI

2 notebook was UL listed?

3 A. I don't know that we've ever
4 seen the original battery pack for that
5 computer.

6 Q. Do you know what --

7 A. I would presume it is but I've
8 never seen it so I can't say 100 percent
9 without actually physically inspecting the
10 battery.

11 Q. Do you know if UL standards
12 govern lithium ion battery packs?

13 A. That would be a question for
14 Mr. Martin, I did not review that before
15 this deposition.

16 Q. Do you know what tests are done
17 under the UL standards to battery packs?

18 A. I have a general understanding
19 of those, but again, I didn't review that,
20 that would be more that was outside my
21 scope, so that would be more of a question
22 or Mr. Martin.

23 Q. So with the understanding that
24 the question better directed to Dr. Martin
25 expertise, what's your general

1 J. KARASINSKI

2 understanding of the tests that are done
3 with battery packs under UL?

4 A. So it would take measurements
5 voltage, it would look at the battery
6 management system to confirm that it's
7 probably -- it has the correct safety
8 design to it and that it meets -- based on
9 the construction and the design, that it
10 meets the UL standard.

11 Q. Do know what specific tests
12 they do to a battery to confirm that?

13 A. I'm not familiar with that, I
14 did not review that and that would be a
15 question for Mr. Martin.

16 Q. Okay, that's helpful because I
17 was just about to ask about specific tests
18 --

19 A. I knew you were -- I knew where
20 you were going.

21 Q. You're not going to testify
22 about the Ogden test or the projectile test
23 or anything like?

24 A. No, sir.

25 Q. Is that something that Dr.

1 J. KARASINSKI

2 Martin would know about?

3 A. Yes.

4 Q. Do you know the ambient
5 temperature that a 18650 cell would go into
6 thermal runaway?

7 A. I believe some of the documents
8 I've seen is anywhere from 300F to 500F I
9 think is what I've seen before.

10 Q. Do you know what industry of
11 standards apply to rechargeable batteries
12 for notebook computers back in December of
13 2010?

14 A. Again, that's outside my scope,
15 that would be Mr. Martin.

16 Q. Do you have any familiarity
17 with the IEEE standards?

18 A. I know of the IEEE standards, I
19 didn't review those.

20 Q. Okay.

21 A. Again, that would be Mr.
22 Martin.

23 Q. What's an exemplar?

24 A. Well, there's two terms that
25 people use loosely in the industry is

1 J. KARASINSKI
2 exemplar and a comparison, so to me an
3 exemplar would be an exact duplicate, a
4 comparison would be something that is
5 similar if we can't find the exact make,
6 model, age, you know, with a battery
7 that's -- you know, a battery -- or a
8 computer that's ten years old I'm probably
9 not going to be able to find that battery
10 to get an exemplar unless the actual
11 company -- sometimes the companies will
12 provide exemplar batteries because they'll
13 have some in-house, but to me a comparison
14 and exemplar, again, they're used loosely
15 in our industry but exemplar to me is an
16 exact identical match, a comparison is
17 something that's similar.

18 Q. So an exemplar in this case
19 would be another Hp Pavilion, the same age
20 and condition as Ms. Marcellin and a
21 comparison might be, let's say, something
22 of the same age but they don't have a new
23 old stock battery to put in, so it's
24 obviously not the same. So that would be a
25 comparison and the one of the same age and

1 J. KARASINSKI

2 condition would be an exemplar; is that
3 fair to say?

4 A. That's fair to say. And I
5 would say most battery manufacturers, they
6 change their BMS ports pretty regularly so
7 it would be extremely difficult to find an
8 exact exemplar unless we got it from the
9 actual manufacturer.

10 Q. So you would really expect to
11 get a comparison, not an exemplar in a case
12 like this because of the age of the
13 product?

14 A. That would be typical, that
15 would be a good assumption, yes. It's not
16 impossible but, again, I mean, define
17 something typically when batteries go bad
18 in their laptops they replace them and
19 throw them out, so we don't even have, you
20 know, one laying around somewhere that we
21 could possibly find, so not a lot of those
22 for sale, used battery computer packs sale
23 online.

24 Q. They end up in the pile at
25 the --

1 J. KARASINSKI

2 A. At the recycling company, see.

3 That's what we talked background earlier.

4 You remembered, look at that.

5 Q. So did you obtain any exemplars

6 in connection with your work in this case

7 or comparisons rather?

8 A. You would have to ask Mr.

9 Martin, I didn't do any inspections of the

10 batteries, so --

11 Q. You didn't get any exemplars

12 but Dr. Martin might have?

13 A. Correct. I'm not aware of us

14 getting any exemplar battery packs.

15 Q. Did you disassemble the Marcellin

16 notebook at all?

17 A. I was present in and out for

18 the lab exam but they did disassemble --

19 the exam was destructive at our facility,

20 they did X-ray it and then disassemble it to

21 get the remaining cells out, as well as the

22 battery management system board that was

23 still -- I believe still attached kind of

24 to the laptop.

25 Q. When you compared the cells

1 J. KARASINSKI

2 that you excavated from the Marcillin
3 notebook, when you begin in the matter what
4 did you compare them to, if anything?

5 A. That's a Steve Martin question.
6 That's on him, that was outside my scope of
7 my investigation, so ...

8 Q. It's probably the same answer
9 but do you have any opinion as to what
10 caused the failure of the Marcellin
11 notebook?

12 A. I have no opinion on that, that
13 was outside the scope of my investigation.

14 Q. If you were asked to try and
15 figure it out would you try or would that
16 just be beyond the scope of your expertise?

17 A. If our client asked I do -- we
18 do look at lithium ion battery packs
19 weekly, so yes, I could do that, but I was
20 not tasked with that and that was outside
21 my scope so I stayed in my lane.

22 Q. So what would you have done if
23 you had been asked to determine what the
24 cause and failure was in the Marcellin
25 notebook?

1 J. KARASINSKI

2 A. We would have continued with
3 the same process we did with the X-rays,
4 going through the battery management system
5 to determine, identify if it was a
6 replacement battery and if it was an OEM
7 from Hp or if it was purchased somewhere
8 else, we would look for those receipts and
9 from those receipts we would try to get a
10 comparison pack from wherever it was
11 purchased or even a exemplar replacement
12 pack and then we do that and we would
13 compare that to the pack in question and
14 see if there were any changes, differences
15 to it and then determine, you know, based
16 on the cell configuration what safety
17 devices were in use at the time or not in
18 use at the time within that pack.

19 Q. Do you know and can you state
20 what the safety features of the Pavilion
21 notebook were?

22 A. I did not review that and
23 again, that was outside the scope of my
24 investigation.

25 Q. When you're looking at possible

1 J. KARASINSKI

2 product failure that's duplicated in a
3 fire, do you ordinarily look at the safety
4 features of that product?

5 A. Well, of course. We would like
6 at the design of the product, the safety
7 features. Like, a simple space heater, did
8 it tip over, does it have a tip-over
9 switch, right? So we would look at those
10 features, those safety features in any
11 product if we're looking at that as the
12 potential failure or cause of a fire.

13 Q. But you didn't do it that in
14 this case because you weren't asked to?

15 A. Correct. Mr. Martin was
16 retained to handle that portion of it.

17 Q. So you didn't review any
18 schematics for the product, right?

19 A. That was outside the scope of
20 my investigation for this loss, yes.

21 Q. You didn't do anything to try
22 to figure out who did manufacturer that
23 counterfeit battery pack?

24 A. That's a question for Mr.
25 Martin. I did not to that, no.

1 J. KARASINSKI

2 Q. What are the critical
3 components of a lithium ion battery?

4 A. Eastbound when you say
5 critical, I guess define critical, what do
6 you mean?

7 Q. I mean --

8 A. Okay. Well, you've got the
9 safety features, right, you've got the
10 design, you've got the layout, sometimes
11 some of the battery management systems have
12 fuses to protect the cells from damage, you
13 know, where those items are stored, if
14 they're stored properly, if they're being
15 misused, mishandled and properly charged.
16 All those -- they all run in together,
17 right, when you're doing an investigation.

18 Q. Can you just generally describe
19 the process of how a battery cell runs into
20 thermal runaway?

21 A. Well, there's multiple --
22 there's multiple ways it can go into
23 thermal runaway. Could be a design issue,
24 it could be improper use issue, it could be
25 overcharging, undercharging, it be could be

1 J. KARASINSKI
2 damage, you know, like, I did the example
3 of most people if you have a
4 battery-powered drill in your house and
5 you're using it in your garage and you drop
6 it on the cement floor, right, that's
7 misuse. But when you drop that on the
8 cement floor, you pick it back up and you
9 hit the trigger and it still works,
10 everything's good, right? But did you
11 damage that battery pack when you dropped
12 it, right? So you got misuse, you got
13 overcharging, undercharging, improper
14 storage, improper use. So there's multiple
15 ways that a pack can go into thermal
16 runaway, as well as fire attack and thermo
17 attack.

18 Q. You talked about wild wind
19 fires, that's an example of a thermal
20 attack and an exterior fire attack, right?

21 A. Well, no, wild wind fires like
22 what happened just in California, burned
23 down all the houses and killed the people,
24 yeah.

25 Q. Right, but when it attacks the

1 J. KARASINSKI

2 battery facility or a Tesla battery and it
3 goes into runaway, that's an example of an
4 external attack?

5 A. Correct, yes. Fire -- I mean
6 all of it could be external, right? You
7 got fire attack, you got thermal attack
8 from heat in fire events, again, misuse,
9 improper use, maintenance of the actual
10 pack and like I said, damaging the pack,
11 you know, during use.

12 Q. So you think that -- you were
13 deferring to Dr. Martin in this but you
14 didn't do anything to determine whether the
15 notebook was in the same condition at the
16 time of fire as it was at the time of sale
17 to Ms. Marcillin, correct? My question is
18 did you do anything to determine whether
19 the notebook was in substantially the same
20 condition at the it was sold to
21 Ms. Marcellin as at the time of the fire?

22 A. Again, that would be Mr. Martin
23 and outside my scope but the only thing
24 that I'm aware of that changed in that
25 laptop was the replacement battery pack.

1 J. KARASINSKI

2 I'm not aware of any other changes.

3 Q. So you talked abuse, how did
4 you rule out improper use or physical abuse
5 of the notebook as a potential cause of the
6 fire?

7 A. You'd have to refer that back
8 to Mr. Martin, that was outside my scope.

9 Q. So it's really for Dr. Martin
10 to say whether it was one of the various
11 causes that we talked about -- improper use
12 overcharge, undercharge, damage, fire
13 attack, thermal attack, and --

14 A. Yeah, if we go back to your
15 question I believe you asked for examples
16 what that would be. But, yeah, I gave you
17 examples of my familiarity with battery
18 packs and what those failures are, but Mr.
19 Martin examines that laptop and those cells
20 and that's a better question for him and
21 that was outside my scope.

22 Q. Okay. All right, and then on
23 page 2 of your report --

24 A. Can you pull that back up
25 again?

1 J. KARASINSKI

2 Q. Yeah, absolutely.

3 A. Sorry.

4 Q. No, that's all right. Do you
5 see it?

6 A. Yes, got it.

7 Q. So I'm looking at the
8 highlighted bullets here, it says that you
9 reviewed NFPA 921 and 1033, correct?

10 A. Yes.

11 Q. My question is, is it your
12 opinion that the identification of an
13 ignition source in a first fuel is
14 sufficient to determine the cause of a
15 fire?

16 A. Well, when we're -- are you
17 talking about cause or classification?
18 Those two terms get run around too. So
19 cause -- if we're talking about cause, that
20 is a circumstances and condition and an
21 agency that resulted in a fire or an
22 explosion of that occurring.
23 Classification is when we talk about the
24 ignition source and the sequence of events
25 that caused the fire. So they're two

1 J. KARASINSKI

2 different things, classification and cause
3 are two totally different terms.

4 Q. Okay. So would the
5 identification of your ignition source and
6 your first fuel, that would give you enough
7 information to determine the cause, I think
8 is what you're saying?

9 A. Well, no, you have to -- in
10 following the scientific method you have
11 to, you know, analyze all that data, no,
12 not just one specific.

13 So if we're talking about the
14 ignition scenario, which is cause, what is
15 the first fuel igniting the ignition source
16 and sequence of events, right, that's what
17 causes, so that in the totality of your
18 entire investigation in all data
19 collection, that's how you would come to
20 your opinion.

21 Q. Okay. So when you're
22 determining that ignition sequence you have
23 to consider the competency of the ignition
24 source and the first fuel ignited, right?

25 A. Yes.

1 J. KARASINSKI

2 Q. You need to determine if the
3 ignition source is actually competent to
4 ignite that first fuel?

5 A. Competent and that it has
6 enough energy to ignite that first fuel.

7 Q. Okay. What do you consider to
8 be the first fuel of this fire?

9 A. Well, the first fuel would be
10 the ignition source and the ignition of the
11 pack failure and the thermal runaway and
12 that would be -- it expels the contents of
13 the battery when the venting is not
14 sufficient enough to contain that stuff, so
15 went the contents of those packs can --
16 shrapnel can, you know, explode and go into
17 different directions and that is a
18 competent known ignition source within the
19 industry, and it sometimes can exceed
20 temperatures of over -- probably a 1000F.

21 Q. So the first fuel was the
22 battery pack itself, not something in the
23 office?

24 A. Correct.

25 Q. So you would describe --

1 J. KARASINSKI

2 A. So I guess to clarify that, so
3 if we're talking about the fire triangle,
4 right, you have to have fuel, heat and
5 oxygen and a chemical reaction. That's
6 basically what's occurring in a cell when
7 it fail, so that would be the ignition
8 source and a first fuel.

9 Q. Okay, that makes medication
10 sense. So when you're talking about the
11 ignition sequence, let's say the first item
12 to be ignited in that room, other than the
13 Hp notebook, would you call that the second
14 fuel perhaps?

15 A. You could refer to it as the
16 secondary fuels, yes, because, like, you
17 know, when you have cells that do fail --
18 like an example, I did a fire down in Miami
19 at a very large garage and they had a
20 bicycle on charge in the middle of COVID,
21 it's, like, a fire-car garage, and that --
22 the battery went into thermal runaway and
23 expelled all over this garage and I had
24 five or six different points of origin and
25 I found battery remains in all those areas.

1 J. KARASINSKI

2 Q. So that's a good example and I
3 think that will help us terminologywise, so
4 I'm going to talk about those -- the
5 battery contents that are expelled and then
6 you opine cause ignition in the room of
7 origin. I'm going to refer to those as
8 secondary fuels if that's okay.

9 A. That's okay, but you kind of
10 were fading in and out there so I didn't
11 hear your entire statement.

12 Q. I apologize. So I was saying
13 your testimony was helpful because you're
14 talking the case in the garage is kind of
15 like what you hypothesize happened here,
16 right?

17 A. Correct. I was giving you an
18 example, yes.

19 Q. Right. So I'm going refer to
20 that battery, that material that was
21 expelled in this case. I'm going to talk
22 about that as secondary fuel because you --
23 or where it's landing I suppose and the
24 things that it's igniting, I'm going to
25 describe as the secondary fuel; is that

1 J. KARASINSKI

2 fair to say?

3 A. That would be fair to say.

4 Q. Because it's your opinion that
5 the battery itself was the first fuel under
6 that NFPA 921?

7 A. Correct, yeah. That meets the
8 requirement of the fire triangle, yes.

9 Q. Okay. That makes sense. All
10 right, I'm going to go to page 6 of the
11 report. I'm just going to zoom out so you
12 can see both of the figures here.

13 A. Okay.

14 Q. So you have two -- you
15 summarize here certain witness information
16 beginning with Ms. Marcellin; is that
17 correct?

18 A. Yes.

19 Q. In the section of your report?

20 A. Correct.

21 Q. So paragraph -- on page 6 you
22 have figures 5 and 6 concerning her
23 testimony about using candles and candles
24 holders and she said she hadn't use either,
25 right?

1 J. KARASINSKI

2 A. Correct.

3 Q. Is that consist with your
4 examination of the scene as you recall it?

5 A. Yes.

6 Q. If she did use candles is it
7 significant to your conclusion that she
8 never used a candle holder?

9 A. I'm not sure I understand what
10 you mean by that.

11 Q. Yeah, so Figure 5 she says she
12 didn't use candles, Figure 6 she says she
13 didn't use a cancel holder, and my question
14 is if she did use candles does the fact
15 that she wasn't a candle holder mean
16 anything in particular to you?

17 A. Not at this time, no.

18 Q. I'm going to put up a record
19 from the local investigators, it's one of
20 the photos that they took.

21 A. Okay.

22 Q. I'm putting up one of the
23 photos that the local investigators took,
24 that's Hp450 and it depicts a candle in the
25 foreground. Do you see that, Mr.

1 J. KARASINSKI

2 Karasinski.

3 A. Yes.

4 Q. Does that change your opinion
5 in respect of whether there was any candles
6 in the house?

7 A. Well, I observed candles and
8 photographed candles. The statement by the
9 insured is that she didn't -- or by the
10 Plaintiff is that she didn't light any
11 candles and this candle in this instance is
12 not in the area of origin, it doesn't
13 support origin based on the fire patterns
14 that are observed.

15 Q. Okay. So this wasn't in the
16 area of origin as you concluded it, right?

17 A. Correct.

18 Q. But does it look like it was
19 burnt?

20 A. It looks like it was used,
21 yeah, based on the wicks are black, yeah.
22 It hadn't been used a lot. Based on all of
23 our candle testing that we've done in our
24 facility, it usually will burn that -- to
25 burn down to that, I mean, it's not all

1 J. KARASINSKI

2 directly all the way up to the top because
3 you want to be able to put the cap on it.
4 That particular candle will have a top for
5 it. So that candle has been burned before
6 based on the soot I see on the three wicks
7 in the candle. But again, that's not my
8 area of origin so I can eliminate that.

9 Q. Okay. Then going back to the
10 figures in your report, you see a Figure 5,
11 Ms. Marcellin discusses not using candles.
12 So now having seen the photograph of the
13 used candle, does that change any of your
14 opinions in this case?

15 A. No, it does not. I mean,
16 people have candles for decoration and
17 never use them.

18 Q. Would you say that this is
19 another oversight by Ms. Marcellin?

20 A. No. Not my opinion.

21 Q. She said she didn't use
22 candles, right, and they were all stored in
23 the back?

24 A. Well, you're -- when she says
25 use, I consider that that did she have any

1 J. KARASINSKI

2 candles lit at the time of fire and I would
3 say no, and that's consistent with what I
4 saw at the fire scene.

5 Q. I understand that, Mr.
6 Karasinski, but in Figure 5 you've draw up
7 square over line 16 to 19, correct?

8 A. Yes.

9 Q. In line 17 and 19 she said they
10 had all been stored in a drawer in the back
11 bedroom, correct?

12 A. Correct, yes.

13 Q. So is it fair to say this is
14 another oversight by Ms. Marcellin?

15 A. To me it's not an oversight,
16 again, Counselor, because people, you know,
17 don't recall. You get -- we run into these
18 situations all the time where people say,
19 no, I didn't discard the cigarette in that
20 location and I don't smoke and then you
21 walk in the house and there's ashtrays full
22 of cigarettes. We know you smoke, right.
23 So, again, why people say things or
24 misinterpret, but the physical evidence
25 shows that there were candles at the

1 J. KARASINSKI

2 property.

3 Q. So you think Ms. Marcellin
4 misinterpreted the question or something?

5 A. No, I just don't think she
6 recalled that all the candles weren't put
7 away.

8 Q. She didn't remember, right?

9 A. Yeah. And that's something we
10 run into all the time and that's why we
11 take photographs and do a physical exam of
12 the location as well as the evidence back
13 at a lab exam to determine if we do have
14 any candle debris within that area of
15 origin or similar.

16 Q. When you look at a witness'
17 statements and the physical evidence and
18 you compare them, is that because not
19 everyone's a great historian of a fire
20 event?

21 A. And I just think people forget
22 and don't recall. You know, I mean, she's
23 sleeping in the front bedroom with the
24 deceased, the back bedroom. I mean, was
25 that ever being used? I don't know, when's

1 J. KARASINSKI

2 the last time you were in it? I mean, I
3 have not been upstairs in my house in my
4 kids' bedrooms in a year. I have no idea
5 what they have up there.

6 Q. But the candle I just showed
7 you wasn't in the back bedroom, right, it
8 was in the living room?

9 A. Yeah, correct. But we saw
10 candles throughout the house.

11 Q. Now on page 9 you state that
12 Ms. Marcellin never had the computer
13 serviced or had any maintenance or
14 modifications done. Do you see that?

15 A. Yes.

16 Q. We talked about the aftermarket
17 battery, do you have any opinion from any
18 source as to how that battery pack got in
19 her computer?

20 A. I do not know who installed
21 that battery pack into that computer.

22 Q. That would be a modification,
23 right?

24 A. I guess it depends on the
25 individual, when you're asking me with my

1 J. KARASINSKI

2 background and expertise, modification to
3 me would be installing a different battery.
4 But a layman person that doesn't do what we
5 do or ask the questions that you ask, to me
6 if I'm purchasing a battery just to replace
7 it, if I'm just the normal consumer, I
8 wouldn't consider that as maintenance or
9 changing it. To me, changing it to an
10 individual that doesn't do this on a daily
11 basis is like taking the thing apart and
12 making alterations to it. So it just
13 depends on what she perceived that question
14 to be, and sometimes I think people just --
15 just to replace a battery pack, they're not
16 changing or altering anything within that
17 computer.

18 Q. Well, she did also say she
19 didn't -- she, herself, never put a battery
20 pack in it, right?

21 A. I believe that was her
22 testimony, yes. But, again, and like I
23 said earlier, I don't know who actually put
24 the battery pack into this computer.

25 Q. You have no evidence whatsoever

1 J. KARASINSKI

2 that it was changed by anyone other than
3 Ms. Marcellin; is that fair to say?

4 A. That's fair to say, yes.

5 Q. Okay. You reviewed Dr.
6 Martin's report, right?

7 A. I did, yes.

8 Q. You saw he concluded the
9 battery was -- that was in the Marcellin
10 notebook was manufactured in 2015?

11 A. I believe that's correct, yes,
12 without pulling up his report.

13 Q. You would agree with me that if
14 a notebook was made in 2010 and the battery
15 in 2015, the battery could not have been in
16 the notebook when Ms. Marcellin bought it?

17 A. I would agree with that, yes.

18 Q. At page 11 of the report you
19 noted that Ms. Marcellin stated no one else
20 used the notebook. Do you see that? It's
21 Figure 15 here.

22 A. Oh, I'm sorry, I was at the one
23 above. Okay.

24 Q. So you see that, Mr.
25 Karasinski?

1 J. KARASINSKI

2 A. Yes.

3 Q. So if Ms. Marcellin didn't
4 change the battery isn't it necessarily
5 true that someone else used the notebook?

6 A. No.

7 Q. Well, how can both statements
8 be true?

9 A. Well, you stated that how can
10 she say that someone else didn't use the
11 notebook.

12 Q. Does change the battery not
13 using the notebook?

14 A. To me the question is with the
15 word use, that to me means I opened up and
16 answered an e-mail. That to me is use, not
17 replacing a battery.

18 Q. So you don't know if by
19 answering that -- when you cite her
20 testimony here in Figure 15, you don't know
21 if she's indicating whether or not anyone
22 used it in any context other than used it
23 for its intended purpose; meaning they
24 checked their e-mail, they went on their
25 banking website or whatever, that's what

1 J. KARASINSKI

2 you understood to mean there?

3 A. Correct. That's what --

4 Q. That's why the statements are
5 consistent to you?

6 A. Yes.

7 Q. Okay. So she new no one else
8 used it but that's consistent with someone
9 else possibly putting the battery in
10 because that's not really using the
11 computer per se; is that fair?

12 A. And again, me as a consumer,
13 that question you would have to be more
14 detailed. In using it, do you consider
15 using it installing a new battery, but that
16 question wasn't asked. So to me use is
17 opening up the computer and actually using
18 it for its intended use, that's how I see
19 that statement. That's my interpretation.

20 Q. So do you think it's important
21 for you, for you to know, for your
22 opinions, who put that battery in there?

23 A. Again, that was outside my
24 scope at that point. I mean, that falls on
25 Mr. Martin. I didn't do anything with that

1 J. KARASINSKI

2 laptop.

3 Q. Right, but --

4 A. I mean if she took -- I mean if
5 you're talking from a plaintiff subrogation
6 standpoint, like, if she took that to a
7 computer store and someone else put the
8 battery in, then that would be important
9 but when I believe we have receipt that she
10 purchased it online and when she purchased
11 it, whoever put it in, I don't know who did
12 that.

13 Q. All right. Just pulling up
14 that document that you just referenced. So
15 I'm just trying pull up the document you
16 just mentioned.

17 All right, I'm going to just
18 put up this first document and I will give
19 you the context of the second document and
20 then when we're on a break, I'll try and
21 find the actual document. But I'm going to
22 put up right now what is the Plaintiff's
23 interrogatory -- the Plaintiff's responses
24 to the request for production. This
25 document is dated March 9, '22, and I'll

1 J. KARASINSKI

2 put it on the screen now. You see that?

3 A. Yes.

4 Q. So I'm looking at this question
5 and answer 13. So before I get into this
6 I'd like you to read to yourself the
7 question and answer, and before we get into
8 any questions I'm going to represent to you
9 that this question and answer were
10 subsequently changed, but this was the
11 answer that we got on March 9, '22. So if
12 you could take a moment, Mr. Karasinski,
13 and look at that, let me know when you've
14 done so.

15 (The witness complies.)

16 Q. Have you finished reading it,
17 Mr. Karasinski?

18 A. Yes.

19 Q. So is that the purchase that
20 you were previously referring to in respect
21 to the aftermarket battery?

22 A. I'm not -- can you pull it back
23 up again.

24 Q. Yeah, sorry.

25 A. No, that's fine, you took it

1 J. KARASINSKI

2 down.

3 Q. Prematurely. So earlier you
4 said that you understood there was a
5 purchase of an aftermarket battery and I'm
6 asking you if that's what I've displayed
7 here, if that's the purchase to what you
8 were referring?

9 A. Yeah, I'm not sure if that's
10 the purchase. I thought I remember seeing
11 some sort of, like, credit card receipt or
12 Amazon receipt. But, yeah, I don't
13 remember the cost or what year.

14 Q. Okay. So would the purchase on
15 July 22, 2015, of an aftermarket battery,
16 would that be consistent with the 2015 date
17 that Dr. Martin found on the subject's
18 battery pack?

19 A. That date would be consistent,
20 yes.

21 Q. Did you do anything to
22 investigate this website, Factory Outlet
23 store?

24 A. Again, no, I -- outside my
25 scope, I didn't do anything concerning the

1 J. KARASINSKI

2 laptop.

3 Q. Okay. So you didn't make any
4 investigation as to what battery was
5 purchased or when or anything like that?

6 A. Again, that's not what I was
7 retained for, that was outside my scope.
8 That would be a Dr. Martin question.

9 Q. Okay. Now, at page 13 of the
10 report you'll see there's a Figure 18 -- a
11 Figure 18 and Figure 19. Can you see
12 Figure 18 and 19 in the picture?

13 A. I can, but that's way outside
14 my technology abilities.

15 Q. Okay, so we have Figures 18 and
16 19 here and you'll see that in the figures
17 you note that Ms. Marcellin's 9 inch
18 compact laptop was in her office in her bag
19 and it was confirmed to be in the closet at
20 the time of the fire and you previously
21 testified it was not in the closet or
22 anywhere that you could see when you
23 visited the scene, correct?

24 A. Correct. We did not locate any
25 remains of a computer within the closet.

1 J. KARASINSKI

2 Q. Then on page 15 at Figure 20
3 and 21 you note that Ms. Marcellin had
4 installed an aftermarket battery in her
5 compact; is that correct?

6 A. That's what she was calling it,
7 yes.

8 Q. So Ms. Marcellin said there was
9 an aftermarket battery, it was in the
10 closet of the office of her house at the
11 time of the fire in the compact notebook
12 but you saw no evidence of that notebook or
13 that battery during your exam, correct?

14 A. There was no physical evidence
15 of any computer or battery pack remains in
16 the closet.

17 Q. Did you undertake any other
18 efforts to locate that compact or that
19 battery?

20 A. We tried to locate it within
21 our photographs and Greg Gorbit's
22 Matterport. I believe we thought we found
23 it but then I think she that that wasn't
24 it, so I have not seen a compact computer
25 anywhere in the photographs or

1 J. KARASINSKI

2 documentation from the Matterport.

3 Q. You would expect to see
4 remnants of the computer during your
5 investigation, right?

6 A. Well, but again, I didn't open
7 every drawer and every door to look for it.
8 The compact issue or computer in there was
9 not -- this information was not available
10 when we were at the site, so besides the
11 collecting evidence that was in the closet,
12 I wasn't looking for another computer
13 besides the two that were in that room of
14 origin.

15 Q. So it could have been somewhere
16 other than where Ms. Marcillin said or the
17 places you looked, but as far as you know,
18 it wasn't there?

19 A. It was not in the closet, no.

20 Q. Now, were you able to rule out
21 that Ms. Marcellin didn't put in the
22 aftermarket battery in her Pavilion
23 notebook that was at issue in this case?

24 A. I did not ask her if she
25 installed it.

1 J. KARASINSKI

2 Q. Did you take any other efforts
3 -- undertake any other effort to rule out
4 that possibility?

5 A. No, because the computer was
6 essentially -- she had no consumer
7 complaints about the computer up till the
8 date of loss besides the battery, so I --
9 it didn't concern me and we knew after the
10 lab exam that it was a replacement battery
11 based on the date stamp of the age, so
12 other than that, I don't have any opinions
13 on who installed it.

14 Q. So we talked about a few things
15 that Ms. Marcellin was unable to recollect,
16 we talked about the compact, we talked
17 about the candles, my question is, given
18 Ms. Marcellin's recollection, do you take
19 anything that she said with a grain of
20 salt?

21 A. No, again, that's following the
22 scientific method and collecting all the
23 data, and the physical evidence did not
24 support what she said. So we -- that's
25 part of our process within the fire

1 J. KARASINSKI

2 investigation community and fire science,
3 so doing interviews and sometimes those
4 interviews are not accurate based on the
5 physical remains that we find, so it's a
6 common occurrence.

7 Q. When you see that an interview
8 isn't accurate based on the physical
9 remains you find, how does that affect your
10 analysis of the rest of the interview?

11 A. I still take whatever her
12 statements are and if any of them can be
13 disproved, then they're disproved, if they
14 can't be disproved, then they're disproved.
15 I mean, not finding the physical remains of
16 that computer in that closet or any other
17 battery remains in that closet for a
18 replacement battery, it wasn't there. We
19 still have clothing that's still intact.
20 That computer was not in the closet. So
21 that doesn't match up with her statement
22 and that is consistent and typical with
23 witness statements all the time.

24 Q. That's because it's tough to be
25 a reliable witness in a house fire, right?

1 J. KARASINSKI

2 A. A house fire where someone
3 passed away, it's even more difficult, and
4 how someone could remember, I mean, I
5 graduated high school in 1991, I don't even
6 know if I had a computer in 1990. So to
7 me, no. I mean, that's a statement that --
8 if she hadn't used it in forever, I don't
9 remember how many years she said she hasn't
10 used that computer, I wouldn't remember
11 where it was in my house, so it doesn't
12 change anything but the physical evidence
13 supports that it was not in the closet.

14 Q. Okay. Where do you think
15 Ms. Marcellin was when the fire started?

16 A. I believe her statement was
17 that she was in bed with the deceased.

18 Q. So she was asleep with Mr.
19 Hollowell in bed?

20 A. I believe that's her statement,
21 yes.

22 Q. You know this just from her
23 statement or is there some other evidence
24 that you looked at as well?

25 A. Her statement and that was also

1 J. KARASINSKI

2 the information that was provided at the
3 scene from the local authorities.

4 Q. Do you have any reason to
5 disagree with her statement that she was
6 asleep with Mr. Hollowell in bed at the
7 time the fire started?

8 A. No, I don't have any reason to
9 disbelieve that.

10 Q. Thinking of going into a longer
11 section now so maybe we should just break a
12 little early for lunch.

13 (Whereupon, a break was taken.)

14 Q. Okay. I'm turning to page 20
15 of your report marked as Exhibit 1, Mr.
16 Karasinski, you see that?

17 A. Yes.

18 Q. So on this page you note that
19 Ms. Marcellin testified she was awakened by
20 a smoke alarm the morning of the fire and
21 she described what she saw in her
22 testimony; is that right?

23 A. Yes.

24 Q. So in this section you cite
25 here she said she woke up from the smoke

1 J. KARASINSKI

2 alarm outside of her bedroom, so my
3 question to you, sir, is how long do you
4 think it would take for the fire you say
5 started in the Hp laptop to set off the
6 smoke alarm on the opposite side of house?

7 A. Well, I think you're taking in
8 out of context, there were two smoke
9 detectors, one on the wall by the door of
10 their bedroom and one on the wall by the
11 office. So when I say she heard the smoke
12 alarm, I'm confident it's the one that was
13 on the wall by the office, not the one in
14 the bedroom at that point.

15 Q. Let's see, so you see on 124
16 lines 2 to 6 that you have in your --
17 displayed on your report here?

18 A. Correct, yes.

19 Q. So here she said she silenced
20 the alarm outside her room, right?

21 A. Correct.

22 Q. That was the first thing she
23 did upon waking up, right?

24 A. The smoke alarms were
25 hardwired, so when one goes off, they all

1 J. KARASINSKI

2 go off.

3 Q. So it's your testimony that the
4 one outside her bedroom was hardwired and
5 so it went off at the same time as the one
6 outside her office; is that right?

7 A. Correct, yes.

8 Q. I'm just going to put up Ms.
9 Marcellin's deposition testimony. See if I
10 can find where she talked about the smoke
11 alarms. One minute. So I'm going to
12 direct your attention to Ms. Marcellin's
13 testimony on pages 160 to 161. You see
14 that there, Mr. Karasinski, page 160 and
15 161? You see that?

16 A. I do, but can you make it
17 larger so I can read.

18 Q. Yeah, of course. I'm going to
19 go through it so you can actually read it.

20 Okay, so you'll see on page 160
21 of her testimony. Do you see the testimony
22 that's listed here at lines 5 through 9,
23 Mr. Karasinski, could you read it?

24 A. Yes.

25 Q. Let me know when you've done

1 J. KARASINSKI

2 so.

3 (The witness complies.)

4 A. Okay, I've read 5 through 9.

5 Q. Okay. You'll see in the
6 following lines 10 through 12, did you read
7 that?

8 (The witness complies.)

9 A. Yes.

10 Q. Now I'm scrolling down to lines
11 14 through 16, you see that?

12 A. Yes.

13 Q. I'll scroll a little further
14 down to the next page, and you see lines 11
15 through 18?

16 A. Yes.

17 Q. Okay. So having reviewed this
18 testimony together, does that refresh your
19 recollection as to whether one or both or
20 neither of the smoke alarms were hardwired?

21 A. The alarm that was outside the
22 bedroom on the wall was hardwired. We did
23 find a battery-operated smoke alarm in the
24 office area but it did not have a battery
25 in it.

1 J. KARASINSKI

2 Q. Okay. So you found a
3 battery-operated smoke alarm in the office,
4 is that what you just said?

5 A. Yeah, it was in the debris, it
6 was -- I don't know where it came from but
7 it was in the debris and it didn't have a
8 battery in it. So the only two operating
9 smoke alarms were the one outside in the
10 hallway, which was hardwired and the one
11 that was adjacent to the bedroom that they
12 were sleeping in. If you walk out their
13 bedroom door it would have been on the wall
14 to the right.

15 Q. Okay. Maybe I need to pull up
16 her testimony again because I think --

17 A. Well, again, the physical
18 evidence, there were two hardwired smoke
19 detectors and there was one
20 battery-operated that we found in the
21 debris with no battery in it.

22 Q. Okay. But the testimony we
23 just reviewed from Ms. Marcellin was that
24 there was a battery-operated one outside
25 her bedroom, right?

1 J. KARASINSKI

2 A. No.

3 MR. SCHWARZ: That's not what
4 it said. The doctor said that.

5 A. That's not what it said.

6 MR. SCHWARZ: The doctor said
7 that.

8 A. Yeah.

9 Q. What does it say on lines 12 to
10 13 there, Mr. Karasinski?

11 A. There's one just outside the
12 bedroom where they were sleeping, that
13 was -- that she believed was battery
14 operated.

15 Q. But she was mistaken?

16 A. Correct.

17 Q. Okay.

18 A. Well, it would have had a
19 battery in it because it would be battery
20 backup as well, so... But the hallway
21 smoke alarm and the one next to their
22 master bedroom where they were sleeping at
23 the time of the event were hardwired. The
24 only battery-operated smoke alarm I
25 found -- that we found was during the

1 J. KARASINSKI

2 processing of the debris and it had no
3 battery in it and that was in the office
4 space.

5 Q. So what you're saying, Mr.
6 Karasinski, is there were three smoke
7 alarms in the house?

8 A. There were two working smoke
9 alarms and one with no battery in it.

10 Q. Right. So there were three
11 total that you found?

12 A. Three in total, yes.

13 Q. Okay. You're saying that the
14 hallway and the one outside her bedroom
15 were hardwired and Ms. Marcellin was
16 mistaken in respect to that battery?

17 A. Correct, the physical evidence
18 did not support that.

19 Q. So that was another oversight
20 in her testimony; fair to say?

21 A. Fair to say. But, again, my
22 wife wouldn't know if one was battery
23 powered or hardwired in my house. So
24 again, that doesn't -- because she was
25 mistaken it doesn't change any of my

1 J. KARASINSKI

2 opinions.

3 Q. That's helpful. So with the
4 understanding that this alarm was outside
5 her bedroom and it was hardwired to the one
6 in the hallway, my question is, how long do
7 you think it would take for the fire that
8 you say started in the Hp laptop to set off
9 the smoke alarm in the hallway?

10 A. It would be pretty quickly. I
11 mean, the smoke would have to get down to
12 the door opening to vent out into the
13 hallway, but probably within a minute to a
14 minute and a half at the longest.

15 Q. So it's your testimony it
16 wouldn't have been more than two minutes
17 from the time of ignition in the Marcellin
18 notebook to the time the smoke detector was
19 activated in the hallway?

20 A. Yeah. Again, I'm giving a
21 range, a minute and a half to two minutes,
22 yes.

23 Q. So you're saying it wouldn't
24 exceed two minutes?

25 A. I would have to do some

1 J. KARASINSKI

2 calculations based on the height of the
3 smoke detector on the wall and the smoke
4 layer in the bedroom, but I would be able
5 to calculate that at a later date, yeah.

6 Q. So you could calculate the rate
7 of smoke deposition in the compartments in
8 this fire?

9 A. We could give you a range but
10 the smoke detectors were so badly damaged I
11 don't -- we weren't able to get any
12 manufacture information, all that, so it
13 would just be a general timeline.

14 Q. But you don't have that general
15 timeline because you didn't do those
16 calculations?

17 A. I haven't done those
18 calculations, no. I could, but I have not.

19 Q. Did you view those calculations
20 as important to your conclusions at all or
21 you didn't think they were important?

22 A. At the time in my investigation
23 they weren't really important because the
24 smoke detector activated and alerted the
25 occupant as intended.

1 J. KARASINSKI

2 Q. But the time that it would have
3 taken to set the smoke detector off is
4 relevant to your analysis of the origin and
5 cause of fire, is it not?

6 A. I'm not sure I understand your
7 question.

8 Q. My question is, isn't it
9 important for you to know how long the fire
10 had been going before the smoke alarm was
11 activated?

12 A. Well, to me the important thing
13 was that it activated and alerted the
14 occupants.

15 Q. So you testified that it would
16 have taken no more than two minutes for the
17 hall hardwired smoke alarm to go off and
18 Ms. Marcellin stated that her -- the one
19 outside her bedroom which she believed to
20 be battery operate but you've told us it's
21 hardwired went off shortly thereafter; is
22 that correct, right?

23 A. Yes.

24 Q. So if that's the case, similar
25 question, how long -- so you've testified

1 J. KARASINSKI

2 that the alarm on her -- I think you
3 objected to the question when I asked you
4 how long would it take for the smoke to get
5 to the opposite side of the house, and the
6 reason you objected was because -- the
7 smoke alarm on the opposite side of the
8 house, the reason you objected was because
9 the one in the hallway and the one outside
10 their bedroom were hardwired, ergo the
11 hardwired one in the hallway was set off
12 first and caused the second to be tripped;
13 is that a fair summary of your testimony?

14 A. When they are hardwired, when
15 one activates, they all activate at the
16 same time.

17 Q. It's your testimony the one in
18 the hallway went before the one in her
19 bedroom, right?

20 A. Correct.

21 Q. Is that the reason why you
22 objected to my question saying how long
23 would it take for a fire you say started in
24 an Hp laptop to set off the smoke alarm on
25 the opposite side of the house?

1 J. KARASINSKI

2 MR. SCHWARZ: Well, I don't
3 know if he objected, he just said
4 that wasn't --

5 Q. I apologize. I'm not trying to
6 be -- to use the word objection in a
7 technical sense, I mean when I said how
8 long would it take for a fire you say
9 started in the Hp laptop to set a smoke
10 alarm off on the opposite side of the house
11 I believe your answer was, I don't think
12 that fairly states the evidence or
13 something to that effect because the one
14 outside her bedroom was, in fact, hardwired
15 to the other; is that right?

16 A. Correct.

17 Q. Okay. The reason you said that
18 is because -- am I to correctly infer from
19 your testimony that the one outside her
20 bedroom went off because the one in the
21 hallway went off, not because smoke can
22 necessarily reach to the other side of the
23 house?

24 A. That's correct.

25 Q. Okay. So with that

1 J. KARASINSKI
2 understanding, looking at her testimony
3 that you cite here in your report at
4 page 20, Figure 29, Ms. Marcellin stated
5 that immediately upon waking she could
6 smell the smoke. So my question to you,
7 Mr. Karasinski, is how long do you think it
8 would take for the fire you say started in
9 the Hp laptop to send smoke out that
10 Ms. Marcellin could smell in her bedroom on
11 the other side of the house?

12 A. I don't have enough data to
13 answer that question right now. I would
14 have to do some calculations.

15 Q. What kind of calculations would
16 you need to do to figure that out?

17 A. Well, I would need the
18 manufacturer of the smoke alarm and do the
19 research on that manufacturer, what it
20 activates at and then I would have to do
21 some fire modeling to -- well, the entire
22 structure to show the smoke layer when the
23 smoke would have actually gotten to that
24 bedroom.

25 Q. You didn't do that in this

1 J. KARASINSKI

2 case, right?

3 A. I did some rough stuff on
4 temperatures but nothing with the smoke
5 alarms.

6 Q. So I think you just kind of
7 refined your answer in respect to the smoke
8 alarms but my -- I'm asking a slightly
9 different question here which is that
10 Ms. Marcellin said she could smell smoke
11 when she woke up on January 24, 2020, so my
12 question is, how long would it take for to
13 smell smoke on the other side of house?
14 Would --

15 A. I can't answer that question,
16 Counselor, I don't know what her sense of
17 smell is, you're asking me, I can't answer
18 that question.

19 Q. Okay.

20 A. Everybody's different. They
21 had a cat, sometimes cats can mask the
22 smell of smoke too with their urine and
23 things of nature, so I can't -- you'd have
24 to ask her that question because I don't
25 know what her sense of smell is. I

1 J. KARASINSKI

2 can't -- it's too broad of a question for
3 me to answer at this point.

4 Q. Yeah, I understand there's some
5 data limitations but I guess I'm just
6 trying to dial down on the timing here
7 because you told me it wouldn't have been
8 more than two minutes for the fire that you
9 say started in the Hp laptop to set off the
10 whole alarm.

11 A. So to bring it into
12 perspective, with all the live burner
13 trainings that I've done and live burner --
14 and room and contents fires that I've
15 conducted, we've always included a smoke
16 detector and it goes off within seconds of
17 the fire beginning, so -- but in this case
18 because the smoke alarm is outside of the
19 bedroom, that smoke layer, the smoke is
20 going to -- so I guess how you describe it.
21 So, right, if you're filling up a pot water
22 and you fill the pot up and it overflows,
23 right, that's the same thing as what smoke
24 does. You take that pot, you tip it upside
25 down, that smoke will fill up that pot

1 J. KARASINSKI

2 until it can get to the ventilation
3 opening, which in this case would be a door
4 opening. So I have to get that smoke
5 outside of that room for that, but I can't
6 do that until the smoke layer reaches below
7 that vent opening.

8 Q. I get what you're saying and
9 that's actually very helpful. I guess what
10 I'm trying to understand -- I guess I
11 understand what you are saying, it would
12 have taken no more than two minutes for --
13 let's think of the office as a pot, right,
14 and it would take two minutes for that
15 pot -- no more than two minutes for that
16 pot to billow with smoke and for the smoke
17 to escape the office and trigger the alarm
18 in the hallway. My question is, how much
19 longer would it take for the smoke to
20 travel from the hallway to her bedroom in a
21 sufficient quantity that she could actual
22 smell it when she woke up?

23 A. I can't answer that because I
24 don't know her sense of smell, so I can't
25 give you that answer.

1 J. KARASINSKI

2 Q. Okay. But would you be able to
3 answer for, let's say, the person -- you
4 know, the average man, the typical smeller,
5 the typical nose --

6 A. Well, like, when I got here on
7 Monday as soon as I opened the car door to
8 the rental car, whoever was in it before me
9 was a smoker and I could smell it as soon
10 as I opened the door without even getting
11 in the car. So again, I just can't answer
12 that question, I don't know what her sense
13 of smell is so --

14 Q. Just taking the car as an
15 example -- sorry to cut you off.

16 A. That's fine. Go ahead.

17 Q. Taking the car as an example,
18 it takes some time for you to get the
19 cigarette smell into the fabric that quick,
20 right? It's not you light the cigarette
21 and then throw it out the window less than
22 a second later and the whole car stinks.
23 It takes some time for the smell to travel
24 throughout the car and be deposited in all
25 the nooks and crannies or whatever, right?

1 J. KARASINSKI

2 Maybe even a short time, but it's some
3 amount of time; is that accurate?

4 A. Well, again, I've never smoked
5 a cigarette in my life so as soon as I open
6 something or where someone has smoked, I
7 smell it right away. So again, but if
8 they're used to smoke smell and things of
9 that nature, I just -- I can't answer it.
10 So I feel like it's asked and answered, I
11 can't give you her sense of smell.

12 Q. No, and I understand, you know,
13 none of us have a crystal ball, we can't
14 tell her what she could or couldn't smell.
15 I guess I'm just trying to think of it this
16 way, like, if my neighbor's barbecuing next
17 door and I'm also in my backyard, I'm not
18 going to smell the barbecue the instant he
19 lights it, it's going to take some time for
20 the smoke to waft up, then it's going to
21 waft over to my house, then I have to smell
22 it and so maybe that takes one second,
23 maybe it takes a minute, maybe it takes
24 five minutes, my question is taking that
25 analogy here, how long was it going to take

1 J. KARASINSKI

2 her to smell that fire?

3 A. Again, I can't answer that
4 without knowing what her sense of smell is,
5 Counselor.

6 Q. Okay. If I asked you to assume
7 that she was normal in every possible way,
8 would you think it would be the exact same
9 amount of time that it would take to set
10 off the smoke detector?

11 A. I don't know even know if she
12 smelled smoke. I mean, sometimes people
13 say they smell smoke just because they hear
14 a smoke detector going off. So again,
15 that's a question you're going to have to
16 ask Carol, I don't have an answer for that.

17 Q. Okay. So you weren't relying
18 on when she claimed she smelled smoke or
19 didn't in your report because people aren't
20 particularly reliable about that; is that
21 fair to say?

22 A. Well, again, I don't know her
23 sense of smell so to me, the smoke alarm's
24 activated, they notified the occupants of
25 the structure that there was smoke in the

1 J. KARASINSKI

2 building and she went and investigated
3 that. So to me, the smoke alarms activated
4 properly so I didn't do any other
5 investigation with the smoke alarms.

6 Q. Okay. So I think I understand
7 your testimony to say that the -- it was
8 the activation of the smoke alarms that was
9 important to you. Whether she smelled them
10 or not -- and then the fact that she heard
11 them. Whether she smelled the smoke or not
12 and when she smelled it or not, that was
13 not important to you, fair?

14 A. That's a fair statement.

15 Q. Okay. Would you agree that if
16 the fire started in the office the smoke
17 would accumulate in the office till it
18 banked below the doorway opening?

19 A. Yes, till it got to the vent
20 opening, yes.

21 Q. Then it would spread along the
22 hallway fuming towards the remainor of the
23 home?

24 A. Yes, because the other --

25 Q. How many --

1 J. KARASINSKI

2 A. -- the rear bedroom doors --

3 I'm sorry, are you --

4 Q. No, please go ahead. The rear
5 bedroom doors.

6 A. The rear bedroom door adjacent
7 to the office, those two doors were shut so
8 the only ventilation would have taken it
9 down the hallway towards their bedroom and
10 into the living room and kitchen.

11 Q. Okay. How long would that
12 take?

13 A. Which part?

14 Q. The second part, after it had
15 banked below the doorway opening of the
16 office and was -- from the spread along the
17 hallway through the ceiling into the
18 remainder of the home?

19 A. Without knowing the airflow and
20 fans and what other doors may or may not
21 have been open, anywhere from 15 to
22 45 seconds probably.

23 Q. There weren't any fans on that
24 you saw, right?

25 A. Well, there's a fan in the

1 J. KARASINSKI

2 living room that was on the ground -- I
3 guess it was -- I guess dining room/living
4 room is kind of all the same but there was
5 a ceiling fan. I don't know if that was
6 operating or not.

7 Q. So the ceiling fan, it could
8 have been operating but you didn't see any
9 other fans, right?

10 A. No, just -- that was the only
11 ceiling fan that I saw.

12 Q. Were any windows open that you
13 saw?

14 A. I don't remember -- no, there
15 weren't any windows open but in their
16 bedroom window that they were sleeping in,
17 I believe there was, like, an AC unit, so
18 that's not typically very airtight so that
19 would be pulling that -- the heat layer
20 that way -- in that direction with the
21 smoke as well. Once the door was opened.
22 The bedroom door to the master bedroom.

23 Q. Okay. So having gone through
24 the -- kind of the basics of the airflow
25 and the fans situation in the house at the

1 J. KARASINSKI

2 time, does that change your answer of the
3 range you gave of 15 to 45 seconds?

4 A. For -- yeah, that's -- that's
5 what I would surmise, based on the size of
6 the house. And again, I can do
7 calculations on that but I did not do
8 calculations prior to this deposition.

9 Q. Then you go on to cite of her
10 testimony here in 21, and you can see that
11 she says when she got to the office the
12 smoke was hovering above her already and it
13 got worse as she retreated from the office.
14 So my question, sir, is how long would you
15 expect that level of smoke deposition to
16 take?

17 A. I can't answer the question the
18 way you asked it. Is there more to your
19 question?

20 Q. Yeah. So she said the smoke
21 was hovering above her when she got to the
22 office and then it got rapidly worse as she
23 was leaving. So she's characterizing the
24 level of smoke deposition in the office and
25 immediately outside the office at the time

1 J. KARASINSKI

2 that she discovered the fire. So my
3 question is, given the amount of smoke that
4 she's describing and observing, how long
5 would you expect the fire if you say
6 started in the Hp to have progressed to
7 produce that amount of smoke?

8 A. I don't think the Hp computer
9 produced that amount of smoke, I think at
10 that point we already had a small fire in
11 the closet from one of the batteries that
12 expended its interior material.

13 Q. So how long do you think the
14 fire had spread at that point in terms of
15 time? So you say that the cell ejected and
16 gone and ignited the closet, my question
17 is, how long had the fire been burning
18 given the amount of smoke that she saw when
19 she came out?

20 A. With the light smoke, probably
21 not very long.

22 Q. Wouldn't you say it's one
23 minute?

24 A. I would say anywhere from maybe
25 one to three minutes.

1 J. KARASINSKI

2 Q. She, I believe --

3 A. And again, that smoke layer's
4 not going to continue to bank down past
5 that opening into the remaining house at
6 that same level. I guess let's just use
7 the word when it equalizes. So as that
8 smoke goes out and down the hallway, it's
9 going to continue going out and down the
10 hallway until it equalizes and it's at the
11 same level and then it will bank down
12 within that room.

13 Q. Okay. Do you know how loud
14 thermal runaway in the 18650 cell is?

15 A. How loud, like --

16 Q. Yeah, how loud --

17 A. Yeah, I've burned cells before
18 and caused them to fail, yes.

19 Q. How loud was it?

20 A. Sometimes it's very loud and
21 sometimes it's not. Sometimes it just
22 sounds like a faucet going off when the
23 flames are shooting out either one under
24 the other.

25 But there are other times when

1 J. KARASINSKI

2 a cell actually ruptures, that's -- that's
3 loud, but I've also seen where cells have
4 vented and lost all their contents and you
5 can just -- you just hear it -- a hissing
6 sound and it's not very loud at all.

7 Q. So were there ruptured cells in
8 this case?

9 A. That would be a Mr. Martin
10 question but I believe there was one cell
11 that was ruptured, I think, if I'm
12 remembering correctly.

13 Q. So that probably would have
14 been louder than the ones that just vented?

15 A. That's -- that's in my
16 experience from our testing that we've done
17 at that facility -- our facility, yes.

18 Q. Okay. All right, I'm going to
19 go to page 23 of the report, and you exert
20 the Allegheny County fire report here,
21 page 23, Figure 31. Do you see that, Mr.
22 Karasinski?

23 A. Yes.

24 Q. Now, the first line that you
25 cite here states that Mr. Hollowell was

1 J. KARASINSKI

2 reported found lying crosswise on the bed.

3 Do you see that?

4 A. Where Allegheny County reported
5 that, yeah. You said where I reported it.
6 That's Allegheny County.

7 Q. I apologize, I meant to say and
8 I hope that I said that you cited the
9 report where they had stated this, and I
10 understand that this is their report that
11 you were noting. So --

12 A. Can you sit a little bit closer
13 to the computer, I'm only getting, like,
14 every other word again.

15 Q. I apologize.

16 A. Sorry.

17 Q. Having enough technical
18 difficulties and you're being more than ...

19 So we're looking at page 23
20 where you have cited the Allegheny report
21 and the first line of the Allegheny report
22 says that Mr. Hollowell was reported found
23 lying crosswise on bed. Do you see that,
24 Mr. Karasinski?

25 A. Yes.

1 J. KARASINSKI

2 Q. Okay. My question is, is this
3 consistent with Ms. Marcellin's testimony?

4 A. Well, I believe she said he
5 fell to the floor when she was trying to
6 get him up, but I'm not so sure that he
7 couldn't have gotten himself back up on the
8 couch after she left to go call 911.

9 Q. Do you remember if she
10 testified about whether he was able to get
11 up by himself?

12 A. I don't remember seeing that,
13 no. I don't remember her even being asked
14 that question.

15 Q. All right, I'm going to go to
16 her testimony. So this is where he's
17 talking about what you said. You see that
18 on page 191?

19 A. Yes.

20 Q. Then it says here that
21 Ms. Marcellin would help him --

22 A. Yes.

23 Q. -- that he would try but that
24 he was not able to get up and go to the
25 bathroom by himself?

1 J. KARASINSKI

2 A. Yes.

3 Q. Okay. So having seen that,
4 does that refresh your recollection as to
5 whether she testified as to if he was able
6 to get up on his own?

7 A. Well, I don't think that
8 question was asked of her. She said he
9 needs help. I mean, if you're in a house
10 fire and you fall to the floor, I'm pretty
11 sure you're going to use all your strength
12 to try to get up, so is it possible that he
13 got himself back up on the bed? It's
14 possible.

15 Q. Okay. Do you think it's
16 probable?

17 A. Well, based on her statements
18 and where he was found, it's probable.
19 Because if he was on the floor and she
20 couldn't get him up and he got himself up
21 at some point after she left, because he
22 was still on the floor when she went back
23 the second time to try to get him out.

24 Q. Do you think it's more or less
25 probable than the possibility that

1 J. KARASINSKI

2 Ms. Marcellin had another oversight in
3 respect to her testimony?

4 A. I'm not sure there's an
5 oversight. I still think that he could
6 have gotten himself back on the bed. I
7 mean, you see the walker in the bedroom, so
8 uses that walker to walk, so he can still
9 use his arms. So for me to sit here and
10 say he couldn't get himself back up on the
11 bed after she left, I mean might it's very
12 probable that he could have.

13 Q. Okay. So you think the
14 likeliest thing is that he got up?

15 A. After she left to go -- got in
16 her car to go call 911. That's the only
17 conceivable explanation I have for him to
18 be back on the bed and that's where he was
19 found because you can see the protected
20 area where his body was on the sheets.

21 Q. That's what the Allegheny Fire
22 Department's talking about in this report?

23 A. Can you pull it back up again,
24 I'm sorry.

25 Q. Yeah, absolutely.

1 J. KARASINSKI

2 A. Actually I have it here, I
3 can... Yeah, they state his two feet on
4 the floor and the rest of his body was
5 basically on the bed.

6 Q. When Ms. Marcellin testified
7 that she had to leave Mr. Hollowell seated
8 there she had to crawl out of the room,
9 right?

10 A. You would have to pull up -- I
11 don't remember her saying she had to crawl
12 out of the room. You've got to show me
13 where that's located.

14 Q. Yeah, I'm sure I can do that.
15 See that?

16 A. Okay.

17 Q. So did that refresh your
18 recollection as to whether she had to crawl
19 out of the room?

20 A. Yes.

21 Q. If the smoke was so intense
22 that she had to crawl out of the room,
23 would you expect it to produce a witness
24 mark like the one in this case?

25 A. By the time he was removed,

1 J. KARASINSKI

2 yes.

3 Q. Okay. Do you remember the
4 witness mark in this case?

5 A. The witness mark?

6 Q. From Mr. Hollowell.

7 A. Yes, on the bed.

8 Q. Yes. Was there anything that
9 was notable to you about it?

10 A. Just there was mostly his upper
11 body on the bed and you could see where his
12 arms were.

13 Q. I think there's --

14 A. Oh, I think there's a
15 photograph in the fire department report if
16 you want to pull that up.

17 Q. How long do you think it would
18 take for the fire that you say started in
19 the Hp laptop to form a witness mark like
20 that?

21 A. I'm not sure I can answer that
22 question because when she leaves to go call
23 911, that fire's still burning and that
24 smoke layer's still banking down within
25 that structure, the entire time she's gone

1 J. KARASINSKI

2 and this is a very remote location and from
3 the time until the fire department got
4 there. So that fire evolved pretty rapidly
5 once you got full room involvement of the
6 closet space.

7 Q. So if you did the sort of
8 calculations that we talked about before,
9 would you be able to tell us how long the
10 fire would have to be going to produce a
11 witness mark like that?

12 A. I don't think you could do
13 that. I'm not aware of any calculation I'd
14 be able to do because, again, as that
15 fire's progressing it's producing heat
16 again and smoke throughout the structure,
17 right, because it's not equalized, it's
18 coming out of that door and so from the
19 time that -- I don't think we've ever seen
20 a clear answer on how long she tried to get
21 him out of that structure, right, and based
22 on her saying that she's got to crawl out
23 of that bedroom space, that fire in that
24 closet space is fully involved and
25 producing that smoke layer. So if she can't

1 J. KARASINSKI

2 breathe standing up, then that smoke layer
3 is already hitting the top of the bed. So
4 once that happens you're going to have a
5 protected area just like you would if you
6 had a magazine sitting on a end table
7 somewhere in the room, you get those
8 protective areas.

9 Q. Okay. I'm going to put up that
10 picture you mentioned. I am going to -- the
11 two photographs Hp 423 and 424 that are of
12 the witness mark. So this is 423. Do you
13 see that, Mr. Karasinski?

14 A. Yes.

15 Q. That's the witness mark we've
16 talking about, right?

17 A. Correct.

18 Q. Here's another view.

19 A. Yes.

20 Q. Same witness mark, right?

21 A. Yes.

22 Q. So having seen the photographs
23 now, is there anything else that you recall
24 that was notable about the witness marks?

25 A. No.

1 J. KARASINSKI

2 Q. Okay. So you told me that when
3 Ms. Marcellin was -- left Mr. Hollowell
4 behind because the smoke was -- because she
5 couldn't breathe standing up, that the
6 smoke layer would have been hitting the bed
7 and you have a protected area. So my
8 question, Mr. Karasinski, is if the smoke
9 layer was that low and it was intense
10 enough that she had to crawl out of the
11 bedroom and Mr. Hollowell was seated on the
12 floor when she did so, would you expect the
13 witness mark to look like the witness mark
14 shown here on 424 and 423?

15 A. Yes.

16 Q. You would expect it to look
17 like this?

18 A. Correct, yes.

19 Q. Okay. So wouldn't Mr.
20 Hollowell --

21 A. You can actually even see
22 another witness mark where the pillow would
23 move.

24 Q. Okay. So my question is,
25 wouldn't Mr. Hollowell have had to be in

1 J. KARASINSKI

2 this position before the deposition of
3 heavier soot in the room?

4 A. He would have had to put
5 himself up there after she left if he was
6 still on the floor, yes.

7 Q. Right, and my question is, if
8 the smoke and soot was so bad that she had
9 to crawl out, at that time when she crawled
10 out he was on the floor, wouldn't we expect
11 a more even distribution of smoke and soot
12 on the bed here?

13 A. No. Not particularly, no. It
14 depends when he got up onto the bed. I
15 mean, you can see the protected area, so he
16 was obviously on bed when he passed.

17 Q. So we can agree he was on the
18 bed when he passed?

19 A. Yes, we can agree to that.

20 Q. So with the understanding that
21 he was on bed when he passed away, my
22 question is, if he was on the floor when
23 the smoke layer was sufficiently low that
24 Ms. Marcellin had to crawl out, would you
25 expect the witness mark to be as white as

1 J. KARASINSKI

2 it is here?

3 A. Yes, because she's -- if I
4 remember correctly, she's, like, like 5
5 foot 2 and she's standing up and that
6 bed -- what is the height of the bed,
7 36 inches maybe, so she's standing in the
8 smoke layer, he's not.

9 Q. So is it your testimony that
10 the smoke layer would have to actually
11 reach the bed in order to produce soot
12 where Mr. Hollowell's witness mark was
13 ultimately found?

14 A. Yes.

15 Q. Okay. So the smoke layer would
16 have to be all the way down to the bed in
17 order for this to be something other than
18 white, let's say.

19 A. Correct.

20 Q. Okay. If the smoke layer was
21 all the way down to the bed, wouldn't you
22 expect the bed to be burned?

23 A. No.

24 Q. The hot gases from the smoke
25 and the radiation from the smoke wouldn't

1 J. KARASINSKI

2 burn the bed?

3 A. No, it's obviously not burnt in
4 the picture.

5 Q. Right. I'm saying if a smoke
6 layer had descended to the level of the
7 bed, which you're saying did not happen in
8 this case, if that had happened, wouldn't
9 we expect the bed to be burned?

10 A. I'm not sure I understand your
11 question.

12 Q. Well, you said at --

13 A. Just because it's a smoke layer
14 doesn't mean that that smoke -- that smoke
15 layer as it's banking down, right, your
16 temperature as it's banking down is lower
17 at the lowest level than it is at the
18 ceiling level. So as that temperature
19 decreases as it's banking down, all that's
20 occurring right now is the smoke that he's
21 breathing in and sitting there is now that
22 protected area where he was sitting on the
23 bed and that bed and the material did not
24 reach its ignition temperature from the
25 smoke layer in that room.

1 J. KARASINSKI

2 Q. Okay. So the right side of the
3 bed with the wheelchair that you mentioned,
4 that's where Mr. Hollowell was sleeping?

5 A. You mean the left side where
6 the chair is?

7 Q. No, I mean the right side.

8 A. I believe so, yes.

9 Q. Okay.

10 A. I did not ask her that, whether
11 she was on that side or he was on that
12 side, but that's where he was found.

13 Q. Okay. Mr. Hollowell was a
14 larger gentleman, right?

15 A. I believe so, yes.

16 Q. Weighed over 200 pounds?

17 A. I don't know how much he
18 weighed.

19 Q. Okay. Mr. Karasinski, does it
20 look like two people were sleeping in this
21 bed?

22 A. I guess what do you mean? It's
23 possible.

24 Q. Does it look to you like two
25 people were sleeping in this bed?

1 J. KARASINSKI

2 A. You mean is it possible that
3 once she got up she just threw the blankets
4 back over, yeah.

5 Q. So it does look to you like two
6 people were in this bed?

7 A. I don't know, she could have --
8 when she get up she could have just thrown
9 the blanket back over and walked out and
10 got out of the room. So, I mean, maybe she
11 did, I don't know, but it looks like
12 somebody was there, it's not -- it's not --
13 it's messy, it's not completely made.

14 Q. So it looks like one person was
15 there, right, at least?

16 A. One person was there at the
17 time of the fire that's deceased now, yes.

18 Q. Okay, I'm going to go back to
19 Ms. Marcellin's testimony at page 187 and
20 you'll see that she discusses here what
21 happened when she woke up. Do you see
22 that?

23 A. Yes.

24 Q. Please take a moment to read
25 that and let me know when you've done so.

1 J. KARASINSKI

2 (The witness complies.)

3 A. Okay.

4 Q. Okay, so my question for you is
5 having reviewed this testimony on page 187,
6 does that refresh your recollection about
7 what Ms. Marcellin said in respect to the
8 covers?

9 A. Yes.

10 Q. Okay. Then turning your
11 attention back to the scene photographs
12 Hp424, does that change your opinion as to
13 whether it looks to you in this picture
14 that two people were sleeping in this bed?

15 A. It -- it's based -- I can't
16 answer that question because, I mean, is it
17 possible that when he got back up on the
18 couch that maybe he pushed them back when
19 he had his hands up, is it possible that
20 the fire department moved that when they
21 were removing his body to get him out and
22 start CPR in the garage? I don't know what
23 it looked like before so... I mean, I know
24 what it looks like now but I don't know
25 what --

1 J. KARASINSKI

2 Q. What does it look like now to
3 you?

4 A. It looks like someone was awake
5 or sleeping on the right side and it
6 looked -- and I don't know, it's not made
7 completely on the left side, so is it
8 possible that somebody pushed them back
9 over when they were trying to get him up
10 and get his -- get him out into the garage,
11 I just don't know what happened during the
12 fire. To say that she misspoke or doesn't
13 recall, I don't know, I don't know what
14 that looked like before.

15 Q. So you said this didn't look
16 totally made to you on the left side, but
17 it's certainly more made than the right,
18 you'd agree with that?

19 A. It's certainly more made than
20 the side on the left, yes.

21 Q. We just reviewed her testimony
22 where she said she through off the covers
23 on both sides of the bed?

24 A. Correct.

25 Q. Also that Mr. Hollowell was on

1 J. KARASINSKI

2 the right side of bed by his wheelchair?

3 A. Yes.

4 Q. Okay. So you said that maybe
5 he had essentially remade the bed or the
6 firefighters when retrieving him might of
7 remade the bed basically?

8 A. That doesn't look like a made
9 bed to me, Counselor, but we can agree to
10 disagree. I don't know what happened.

11 Q. Of course.

12 A. When you're asking me a
13 question that I can't answer because
14 because I don't know if someone pushed
15 those back when they were getting the body
16 or when the fire department was there, that
17 does not look like a made bed to me, that's
18 not a bed that I -- if I made it, that's
19 not made to me, so that's made to you,
20 that's your opinion.

21 Q. To be clear, Mr. Karasinski,
22 this is not a made bed to me.

23 A. Okay.

24 Q. I am merely trying to point out
25 that to my eye, this looks like a bed that

1 J. KARASINSKI
2 one person was sleeping in on the right
3 side, and you agreed with me that the left
4 side certainly more made up than the right.
5 So I'm trying to deal with this visual
6 inconsistency, that she said she was in the
7 bed asleep with him, she said she through
8 the covers off on on both sides, and yet
9 looking at this picture, it doesn't look
10 like someone was in bed on that side and
11 through the covers off on that side; is
12 that fair to say?

13 MR. SCHWARZ: No, that's your
14 interpretation, you've asked him
15 three times and he's already answer
16 that he can't say what happened after
17 the firefighters got there and they
18 removed the body. So you can ask him
19 a hundred times, he's going to give
20 you the same answer.

21 Q. So it's your testimony that if
22 we credit Ms. Marcellin in her deposition
23 that someone else got the other side of the
24 bed into the condition that it is that
25 we're looking at in Hp424?

1 J. KARASINSKI

2 A. Can you repeat that question?

3 It didn't sound like a question, I thought
4 you were making a statement, I'm sorry.

5 Q. No, I'm trying to understand
6 your testimony. I think you said that if
7 we take Ms. Marcellin's testimony to be
8 true that she removed the covers on both
9 sides, that she was sleeping opposite Mr.
10 Hollowell and that she was sleeping on the
11 other side of the bed that somehow the
12 covers must have been pulled up basically
13 on the other side and you are saying maybe
14 Mr. Hollowell did it and maybe the fire
15 fighters did it, you don't know?

16 A. That is correct.

17 Q. But someone did it because it's
18 not in the condition that she said it was,
19 right?

20 A. Yeah, I don't even -- I don't
21 have a photo of the other side of the bed,
22 maybe she was laying on top of it and had a
23 blanket on and there's a blanket laying on
24 the other side of the bed. I -- your
25 opinion is that that's a made bed, that's

1 J. KARASINSKI

2 not my opinion. Okay, so --

3 Q. Well, let's be clear, I've
4 stated it's not my opinion it's a made bed,
5 we agreed that one side is more made than
6 the other. Here's the other photo of the
7 bed, I don't know if that helps you. Does
8 that change any of your testimony?

9 A. No.

10 Q. You don't see any indication
11 that there was, like, she was sleeping with
12 a throw blanket, right, like you said?

13 A. It could be on the floor on
14 that side of the bed by the window.

15 Q. On the other side of bed there
16 could be a throw blanket --

17 A. Where the garbage can is --

18 Q. Okay, so --

19 A. -- there could be a blanket on
20 the floor or she did throw them back and in
21 the time that he was on the bed still alive
22 or when the fire department was trying to
23 get him out, they could have just pushed
24 the blankets over. I -- I -- again, I
25 don't know.

1 J. KARASINSKI

2 Q. So you don't see this photo and
3 the issues that we discussed in respect to
4 the witness mark to be inconsistent with
5 her testimony at all?

6 A. No, because I don't know what
7 happened after she left.

8 Q. Okay. But you have no reason
9 to disbelieve what she's testified to based
10 on the images we've just reviewed?

11 A. No.

12 Q. Okay. Now, when you have a
13 case with humans in the premises, it's
14 important to understand their locations and
15 movements prior to the time of the fire,
16 right?

17 A. Yes.

18 Q. I'm showing you some evidence
19 that Ms. Marcellin might not have been in
20 the place she said she was at the time of
21 the fire, right?

22 A. Well, she was all over the
23 house at the time of the fire.

24 Q. Right, but she says when she
25 woke up on the morning on the morning of

1 J. KARASINSKI

2 January --

3 A. 20th -- 24th.

4 Q. -- 20th -- 24th, thank you. I
5 was just trying to do the years and dates.
6 So when she woke up on the morning of
7 January 24th she said she was in bed and
8 what we just looked at appears to indicate
9 that she might not have been in bed; is
10 that fair to say?

11 A. Again, I -- that's your
12 opinion, not mine. She could have thrown
13 the covers off --

14 Q. Mr. Karasinski -- Mr.
15 Karasinski, is it possible, in your
16 professional opinion as a certified fire
17 investigator, that Ms. Marcellin was awake
18 when the fire alarm went off, not asleep?

19 A. Based on her testimony, she was
20 asleep.

21 Q. Right, but setting aside the
22 moment of her testimony and just relying on
23 your experience as a fire investigator
24 having responded to many cases, my question
25 to you is, is it possible that she was not

1 J. KARASINSKI

2 asleep in bed at 4:00 a.m.?

3 A. I believe she was in bed asleep
4 when she discovered -- when the smoke
5 alarms went off and she discovered the
6 fire.

7 Q. So your testimony is it's
8 impossible?

9 A. Anything is possible,
10 Counselor --

11 Q. Okay. So --

12 A. -- but based on her statement
13 and its consistency with what we observed
14 at the site on how she woke up because of
15 the smoke alarm, got out of bed, hit the
16 silence button on the smoke alarm that was
17 on the wall and proceeded to go inspect
18 where the fire was located. Now, I mean,
19 when you're asking if a computer -- a
20 compact computer has been in that closet
21 since 1990 and she's incorrect, I'm okay
22 with that. But if she's telling us that
23 she woke up out of bed and that's
24 immediately what she did and it's the same
25 day she gave that statement, I put more

1 J. KARASINSKI

2 credibility to that witness statement than
3 I do on something that may have been in the
4 closet for 20 years.

5 Q. We talked about the date of the
6 manufacture of this computer, do you know
7 when Ms. Marcellin said she bought it?

8 A. I don't recall when she
9 purchased the actual computer itself, no.
10 Again, that was Mr. Martin's, I didn't do
11 anything with the laptop.

12 Q. Did you know that Ms. Marcellin
13 alleged in her complaint she purchased the
14 laptop in 2010 and later stated in an
15 interrogatory she purchased it in 2015?

16 A. I'm not aware of that, no.

17 Q. Does that have any -- learning
18 that fact now, does that have any effect on
19 any of your opinions in the case?

20 A. Not as it pertains to the
21 computer because the computer was outside
22 the scope of my investigation.

23 Q. Okay. So this kind of goes
24 more into the compact category where you
25 don't view it as significant in respect of

1 J. KARASINSKI

2 a statement that you would look at forming
3 your opinions in the case?

4 A. Well, I would look at it to see
5 approximately how old that product was.
6 But again, anything that had to deal with
7 the laptop was the scope of Dr. Martin and
8 not myself.

9 Q. What else did you do other than
10 reviewing Ms. Marcellin's testimony to
11 figure out where she was when the fire
12 started?

13 A. Well, we've got the statement
14 that the locals gave us on what she did and
15 then we also have her deposition on with
16 she did, which is so -- which is consistent
17 with what she told the local fire marshals.

18 Q. So other than reviewing her
19 statement and -- her statement to locals
20 and her deposition testimony, is there
21 anything else you did to figure out where
22 she was when the fire started?

23 A. Just a review of where the
24 physical evidence is located. She said she
25 went to the kitchen to get a fire

1 J. KARASINSKI

2 extinguisher, said the fire extinguisher
3 wouldn't work, we found it, again, in the
4 kitchen on the counter so her statements
5 were consistent with what she advised the
6 local fire marshals and what states in
7 her -- in her deposition on what she did
8 when she discovered the fire and the smoke
9 alarm was activated.

10 Q. Would you agree it's important
11 to understand what humans in the premise
12 are doing at the time a fire starts?

13 A. Well, she advised that she was
14 sleeping.

15 Q. Right. I'm saying generally,
16 do you think it's important to determine
17 where -- what humans were doing and where
18 they were?

19 A. Oh, absolutely. When the only
20 two occupants are contending that they're
21 in the same bedroom and they're asleep,
22 there's no other occupants in the
23 structure.

24 Q. Do you know --

25 A. So I had any occupants -- other

1 J. KARASINSKI

2 residents in the structure, then they would
3 have been interviewed as well to see what
4 they were doing, but those were the only
5 two occupants in the structure and they
6 both -- well, she advised, not they both,
7 she advised that she was asleep at the time
8 and so was Charles and when she woke -- she
9 woke up because of the smoke alarm, she was
10 sleeping.

11 Q. Do you remember why
12 Ms. Marcellin had to call 911 through her
13 OnStar system?

14 A. Well, it's a very remote
15 location, I remember we didn't have a
16 signal there when I -- when we were there
17 doing our inspection too, so I don't know
18 that she had a good enough cell service to
19 go -- to make that phone call and I think
20 that's why she went to her car to use
21 OnStar to call 911, and I think she had an
22 issue with that so she had to drive down
23 the road as well.

24 Q. Do you remember if she
25 testified about her land lines at all?

1 J. KARASINSKI

2 A. I don't remember if she
3 testified on her land lines.

4 Q. She testified that she was
5 unable to access a cordless phone that was
6 in the office, does that refresh your
7 recollection at all?

8 A. I remember seeing a phone, I
9 don't remember her saying she used it
10 because she wouldn't go into the room that
11 was on fire.

12 Q. So the phone you saw was in the
13 office?

14 A. I believe, if I remember
15 correctly, there was one on the desk to the
16 right, I think. I'd have to go back
17 through and look at my photograph.

18 Q. Were there any other cordless
19 phones in the building?

20 A. Not that I saw, but I guess I
21 wasn't really paying attention to phones.

22 Q. So you weren't looking into
23 assessing Ms. Marcellin's testimony in
24 respect of how she made the emergency
25 calls?

1 J. KARASINSKI

2 A. No, I read her deposition on
3 how she called it, and I believe it was
4 that she didn't have a cell service in that
5 location, which we all had issues when we
6 were there doing our inspection, and then
7 she got into the car and tried to use
8 OnStar and I guess she couldn't connect
9 OnStar with the vehicle still there so then
10 she drove down the road and was able to get
11 in touch with OnStar and make the 911 call.

12 Q. Okay. If we look at her
13 testimony on page 115 you'll see she
14 says -- this is where she talks about her
15 cordless phone that we mentioned. See
16 that?

17 A. Okay.

18 Q. So having reviewed this
19 testimony, does that refresh your
20 recollection about whether she had a
21 cordless phone in the house?

22 MR. SCHWARZ: Ben, could you
23 show the page before that because I
24 think this is a continuation of
25 testimony.

1 J. KARASINSKI

2 MR. LEVITES: Sure.

3 (Mr. Levites complies.)

4 MR. SCHWARZ: I mean going up.

5 Okay, thank you.

6 Q. That help, Mr. Karasinski?

7 A. Yup. Yes.

8 Q. So she had a land line, right?

9 A. That's what she states, yes.

10 Q. Okay. If I told you that she
11 had another cordless phone that was in the
12 protected second bedroom, does that fact
13 have any significance to you?

14 A. When there's a fire and people
15 are scared, no, it doesn't.

16 Q. Okay. So --

17 A. Everyone reacts differently.

18 Q. Okay. So the fact that she
19 didn't use the phone that was in the
20 protected bedroom, it's neither here nor
21 there in your analysis?

22 A. Again, that's a question for
23 her, but people do crazy things, you got a
24 fire, you got someone that can't get up on
25 their own and she doesn't want to leave and

1 J. KARASINSKI

2 that's the only way she can call 911 is to
3 get out. She said when she was trying to
4 get him up she couldn't stand up, she had
5 to crawl out of the building. So now
6 you're asking me if she's going to crawl to
7 the phone or exit the building? It just
8 depends on the individual. We all do crazy
9 things when we're scared.

10 Q. Going to page 27 of your
11 report, there's a diagram here, Figure 37,
12 illustration of a compartment fire. Do you
13 see that?

14 A. Yes.

15 Q. In developing fire in a
16 compartment, how does the hot gas layer
17 form?

18 A. Through buoyancy. Heat rises,
19 correct, so it will go to the ceiling and
20 as you can see on the right side of the
21 figure, you can see where it's got a little
22 header that comes down and this is what we
23 were talking about when I was talking about
24 the pot, right. So as the fire continues
25 to grow in size and intensity in the

1 J. KARASINSKI

2 closet, it starts to fill that room with
3 smoke and then that smoke will bank down
4 until it gets to the opening of the door
5 and that smoke will then start to travel
6 through the structure on, you know,
7 whatever doors are open and that will
8 continue to do that and that heat layer
9 will go out that door until that heat
10 layer's consistent and, like I said before,
11 equalizes with itself and then it will
12 continue to bank down to that room.

13 Q. What comprises the hot gas
14 layer?

15 A. What do you mean? Articulates,
16 smoke, heat?

17 Q. Yes, that's the answer I'm
18 looking for. Are there other things?

19 A. That's all I can recall.
20 That's all I have this right second, but
21 yeah.

22 Q. What's the dominant form of
23 heat transfer from the hot gas layer to the
24 room in a developing compartment fire?

25 A. Well, I would say your heat

1 J. KARASINSKI

2 transfer is all three motives of heat
3 transfer, you've got radiant heat,
4 conduction and convection.

5 Q. Would you say one is dominant
6 or you just can't say?

7 A. Well, they're all in play with
8 a compartment fire. Each motive of heat
9 transfer is -- in a compartment fire you're
10 going to use all three.

11 Q. I'm specifically talking about
12 the mechanism by which heat was transferred
13 from the hot gas layer to the rest of the
14 room. What's the dominant motive?

15 A. Then that would be radiant --
16 radiant heat.

17 Q. Okay. Couldn't the forces that
18 are depicted in this Figure 37 have caused
19 the thermal runaway that Dr. Martin
20 hypothesized took place?

21 A. No, because she witnesses the
22 computer having an issue and smoking and
23 shrapnel coming out of the computer on fire
24 when she goes to look at the room and
25 discovers the fire and that the computer is

1 J. KARASINSKI
2 having an issue. So at that time that's at
3 the incipient stage. So that heat layer --
4 she's standing up, she's not standing in
5 the heat layer. So the answer is no, that
6 radiant heat -- we don't have enough
7 radiant heat at the time that the computer
8 begins to fail.

9 Q. So you're testifying that the
10 forces that are depicted in Figure 37 could
11 not have caused the thermal runaway that
12 Dr. Martin hypothesizes took place because
13 of the -- Ms. Marcellin's statement; is
14 that fair to say?

15 A. She's the one that witnessed
16 the fire and her statements are supported
17 by the physical evidence of the computer in
18 the batteries in the physical evidence that
19 we found in the room that were, as she
20 described, in the ceiling on fire and
21 bouncing everywhere. We don't have a heat
22 layer that's going to be banking down and
23 attacking that computer at the time that
24 she discovers the fire. Now, if she
25 doesn't discover the fire and we get to

1 J. KARASINSKI

2 where the heat layer is now after the fire
3 was extinguished, then my answer would be
4 different, my answer would be yes at that
5 point. But at the point that she discovers
6 the computer that's having an issue and
7 failing and the projectiles are -- in cells
8 are leaving the computer, she is standing
9 up in that room and visually sees that,
10 there's not enough radiant heat to cause
11 that computer to go into thermal runaway.

12 Q. Okay. So I think you answered
13 my question, and it's Ms. Marcellin's
14 testimony that really disposes of that as a
15 possibility?

16 A. Based on the physical evidence
17 is supported by her testimony on what she
18 saw.

19 Q. Well, why don't take just the
20 physical evidence and setting aside her
21 testimony. So without relying on any
22 testimony that she's given in this case,
23 does that change your question as to
24 whether the forces depicted in Figure 37
25 could have caused a thermal runaway Dr.

1 J. KARASINSKI

2 Martin hypothesized to happen here?

3 A. Only -- only later on during
4 the event when that heat layer became lower
5 to get that computer to its melting
6 temperature and to get the batteries to
7 start to decay from thermal attack to go to
8 thermal runaway. So all I'm saying is at
9 the time she discovers this, the only thing
10 that's occurring is the laptop and the
11 batteries expending themselves out of the
12 laptop. The physical evidence supports
13 what she's saying because we found foil,
14 end caps, positive/negative caps, we found
15 the cells that weren't no longer in the
16 computer in multiple locations in the room.
17 That supports her statement that she gave
18 on what she saw.

19 Q. Do you agree that the rate of
20 fire growth as determined by the witness
21 statements is highly subjective?

22 A. Absolutely.

23 Q. Would you also agree that many
24 times witness are reporting the fire growth
25 from the time of their discovery and she

1 J. KARASINSKI

2 can't really correlate the ignition time?

3 A. Well, we just talked about when
4 the smoke detector would have been
5 activated. So now we're going to be in
6 this room within that minute and a half to
7 two minutes of the smoke detector
8 activating and she is standing up in that
9 room. So, I mean, you know, right, the
10 boiling temperature of water is
11 212 degrees, you're not going to stick your
12 hand in a boiling pot of the water, right,
13 at 212 degrees, so we don't even have
14 200 degrees at the ceiling level when she's
15 standing in there. So that radiant height
16 is not going to produce enough heat
17 downward to attack that laptop to cause
18 those batteries to begin to fail and to go
19 into thermal runaway.

20 Now, as I said before, at the
21 thermal layer where it is now at 4 feet
22 down, yes, we are going to reach
23 temperatures great enough from radiant heat
24 to cause that laptop to go into thermal
25 runaway. But at the time that she

1 J. KARASINSKI

2 discovers it, we do not have those
3 temperatures and they're not significant
4 enough.

5 Q. So my question's a little
6 different, separate and outside of this
7 case and Ms. Marcellin, I'm just asking
8 whether you would agree with the principle
9 that many times witnesses are reporting
10 fire growth from the time of their
11 discovery which you can't directly
12 correlate with the time of ignition?

13 A. Correct. And she doesn't look
14 into the closet so she doesn't see a fire.

15 Q. Eyewitness data about how fast
16 the fire grows, is that evidence that you
17 can use one way or another to support your
18 hypothesis?

19 A. Sometimes, but it depends on
20 all the other data that you collected.

21 Q. So you testified that you
22 believe the inhabitants of the house were
23 sleeping when the fire started, right?

24 A. Yes.

25 Q. You base that upon her

1 J. KARASINSKI

2 testimony, which you have no reason to
3 disbelieve based on the evidence you
4 reviewed?

5 A. Correct.

6 Q. On page 28, Figure 38, blowing
7 up. This is showing the fridge side of the
8 kitchen. Do you see that, Mr. Karasinski?

9 A. I do.

10 Q. On the left side of the images
11 is a toaster oven, and my question is, are
12 you aware that the local investigator said
13 that the toaster often was on and glowing
14 and he unplugged it at the time he
15 responded to the fire?

16 A. That's not a correct statement.

17 Q. What's incorrect about that
18 statement?

19 A. A fireman said that, not the
20 fire investigator.

21 Q. I apologize. So with that
22 correction, were you aware that a fireman
23 had said that the toaster oven was on, it
24 was glowing at the time he responded to the
25 fire and that he unplugged it?

1 J. KARASINSKI

2 A. I did see that in a handwritten
3 statement that was provided once we
4 received the local's reports from the FOIL
5 requests.

6 Q. Why would the toaster oven be
7 on if the inhabitants of the house were
8 asleep before the fire?

9 A. I don't know that the toaster
10 was on. I don't even see an outlet that it
11 could be plugged into.

12 Q. Looks like there's a couple of
13 receptacles in this photograph.

14 A. Where? There's a receptacle
15 behind the refrigerator.

16 Q. I see two receptacles here
17 (indicating) and it looks like there's
18 another one right here. You see that?

19 A. You got to take your box away,
20 it's covering the picture.

21 Q. You see that, looks like
22 there's a little shape here?

23 A. Yeah, I don't know if that -- I
24 don't know if that's an outlet or not.

25 Q. And then, if he says he

1 J. KARASINSKI

2 unplugged it, then why is it sitting
3 perfectly up against the wall like it is?

4 A. I don't know that that's an
5 accurate statement.

6 Q. Now, your testimony is that
7 Fireman Beaton [phonetic] was wrong?

8 A. I'm not saying he was wrong,
9 but why unplug it when you can just turn it
10 off if it's on?

11 Q. Well, whatever --

12 A. I don't see an outlet typical
13 with these toaster ovens. You usually only
14 have a three or four-foot cord. So I don't
15 know if that's an outlet behind the toaster
16 oven. I can't say that it is or it isn't.
17 It doesn't look like the same outlet that's
18 over here which has got the wood trim
19 around it for the cover plate. I can't say
20 that that's that, it looks like it could
21 just be a shadow of the toaster oven. So
22 if the only outlet in this kitchen is
23 behind the refrigerator, the toaster oven
24 is not going to reach that outlet.

25 So I see that there's a plug

1 J. KARASINSKI

2 there, is it possible that he unplugged the
3 refrigerator? I just don't have enough
4 data.

5 Q. So you're saying he might have
6 been mistaken about it being on, mistaken
7 about it being glowing and instead
8 unplugged the refrigerator?

9 A. That's the only thing I can see
10 that's unplugged, the refrigerator, it's
11 behind the fridge. And the cord for that,
12 for a toaster oven is not going to reach
13 from there to that outlet.

14 When you buy these toaster
15 ovens, they're going to have a three or
16 four-foot cords. They're not going to have
17 a six-foot cord.

18 Q. All right. I'll take a look
19 and see if I can get some better photos of
20 the Matterport, and then we can button that
21 up after the break. But I'd like to you
22 assume for the purposes of my next question
23 that there's an outlet directly behind the
24 toaster oven, can you do that for me?

25 A. If Steve says I can answer a

1 J. KARASINSKI

2 hypothetical, that's up to Steve.

3 MR. SCHWARZ: You can answer.

4 Q. So assuming that the toaster
5 was indeed plugged in and glowing as
6 Mr. Beaton [phonetic] says it was, does
7 that indicate to you that someone was
8 awake?

9 A. Someone could have had it just
10 on the oven setting, and they could have
11 accidentally left it on.

12 Q. It could have been on all
13 night?

14 A. Could have been. They have an
15 oven setting, you can set it at 350, 400,
16 450, and you can cook whatever you want in
17 there, just as you would in a normal oven.

18 Q. But that would be one
19 explanation as to how beyond -- per being
20 awake would be another one, right?

21 A. It's possible. But her
22 statement is that she was sleeping, is it
23 possible that she used that the night
24 before they went to bed and accidentally
25 left it on, absolutely.

1 J. KARASINSKI

2 Q. Is it possible --

3 A. And then the fire department --
4 and you leave it on, nobody opened it to
5 see if there was food in it.

6 Q. Did you consider the toaster as
7 a potential ignition source in the case?

8 A. No, it's not my area of origin
9 and there's no fire damage there.

10 Q. So you didn't make anything of
11 the Beaton's statement one way or the
12 other?

13 A. No, just like the other
14 statement about the furnace having a blow
15 out. I don't even know blow out.

16 Q. When you went to the kitchen,
17 did you notice the coffee pot was full?

18 A. I did not notice that, that did
19 not catch my eye.

20 Q. Now, having told you that the
21 coffee pot was full, did you make anything
22 of that?

23 A. No, I make my coffee every
24 night the night before, so it's full and I
25 set the timer, and it starts before I wake

1 J. KARASINSKI

2 up.

3 So, is it possible that she
4 made it the night the night before and set
5 it on a timer and it was brewing in the
6 morning before they woke? Yes, absolutely.

7 Q. So it's your testimony that she
8 may have set up a timer from the night
9 before, and the coffee pot was brewing at
10 4 o'clock for them to wake up at five or
11 something like that?

12 A. It's possible or is it possible
13 that they didn't drink the coffee from the
14 day before and that was just left there.

15 Q. Is it also possible that
16 someone was awake at 4:00 a.m. and made the
17 coffee?

18 A. Counsel, you keep going back to
19 that. My statement that she said she was
20 sleeping and evidence supports that, okay?

21 Q. Okay.

22 A. I don't know if she left the
23 toaster oven on accidentally. She's
24 elderly, it's possible. I don't know if
25 they didn't finish the coffee the day

1 J. KARASINSKI

2 before and she didn't she didn't clean it
3 because she doesn't clean it up that day.
4 Maybe she pours it out in the morning when
5 she goes to make a new pot. Maybe that was
6 left over from the day before. It doesn't
7 mean that she was up.

8 Q. So we are looking at page 30
9 now and you'll see a cite NFPA 921643, do
10 you see that?

11 A. Yup.

12 Q. It discusses the hot gas layer?

13 A. Yes.

14 Q. So it says that the first
15 sentence says that radiant flux from the
16 hot gas layer can produce damage to the
17 upper surfaces of contents and floor
18 covering materials, did I read that right?

19 A. Yes.

20 Q. So you would expect horizontal
21 materials to be more damaged than vertical
22 ones, right?

23 A. Well, it depends what the
24 material is made of.

25 Q. Assuming that materials are all

1 J. KARASINSKI

2 made of same thing.

3 A. What material are you asking me
4 that it's made of?

5 Q. Everything in the room is made
6 of paper. Some items are vertical, some
7 items are horizontal. Would you expect the
8 horizontal materials to be more damaged
9 than vertical?

10 A. Well, that's -- you would
11 expect -- if you reach the ignition of the
12 paper, then you would expect that it's
13 going to burn more regularly in a vertical
14 configuration than it's going to burn in a
15 horizontal configuration.

16 Q. So you would expect vertical --

17 A. So I guess, yes. So explain
18 that, right, if I take a piece of paper, no
19 windows open, no air movement, and I light
20 the top right corner of that piece of
21 paper, that top piece of paper, that right
22 corner that you light with an open flame,
23 it is going to burn until it runs out of
24 fuel and it's going to extinguish.

25 Now, if I take that same piece

1 J. KARASINSKI

2 of paper and I light the bottom right
3 corner, right, now, we have fuel and we
4 have the configuration, that's going to
5 allow that complete a piece of paper to
6 burn in it's entirety.

7 Q. Okay.

8 A. That's based that that's based
9 on the fuel configuration.

10 Q. So would you expect that to be
11 generally true, that vertically configured
12 items would be more damaged in a
13 compartment fire like this than horizontal?

14 A. Yeah, because the horizontal,
15 you can see, like, when we're talking about
16 the magazines and stuff like that the
17 protected areas, when they're horizontal,
18 that fuel configuration is not going to
19 support flaming combustion.

20 But now, you take that piece,
21 that horizontal magazine, and you tip that
22 magazine vertical, and you put that in the
23 same fire event or same open flame, you're
24 -- and you light the bottom of that --
25 because that fuel configuration, now, that

1 J. KARASINSKI

2 has time to grow and spread, because it has
3 the heat and it has the fuel.

4 Q. So you mentioned the furnace,
5 it's page 33 where you discuss the furnace.

6 A. Yes.

7 Q. Did you consider the furnace
8 the cause of fire?

9 A. Absolutely.

10 Q. How did you forensically rule
11 out the furnace?

12 A. There's no fire damage inside
13 of room mechanical room of furnace. There
14 was no fire damage there, it was only soot,
15 this is typical of what you would see if
16 the furnace comes on during fire event and
17 it will suck in heated gas into that layer.

18 There was no fire damage to the
19 door that was shut, and Carol also states
20 that she was hoping it was the furnace and
21 there was going to be something wrong with
22 it. And she actually physically opened the
23 door and then saw that there was no fire
24 and that's when she went to the office
25 space. So I'm eliminating it based on

1 J. KARASINSKI

2 witness statements and based on fire
3 patterns.

4 Q. So you see the following figure
5 shows the hallway floor, is that what it
6 looked like when you first showed up on the
7 scene, February 2020?

8 A. Can you scroll up, I can't see
9 the floor.

10 Q. Oh, I apologize, It's shown
11 right here, do you see that?

12 A. That's how it looked when we
13 got there, yes.

14 Q. Okay.

15 A. So if you look at this closely
16 though, those are the contents that were
17 thrown out from the closet by the fire
18 department.

19 Q. This was the -- this was how it
20 was when you got there?

21 A. Yes, that room, as you can see
22 the piece of sheeting covering the door to
23 secure the door from anyone having access.

24 Q. So you were referring to
25 sheeting here?

1 J. KARASINSKI

2 A. Yeah, that wood sheeting was --
3 I'm assuming that investigator from NEFCO
4 put it up, because that was up when I got
5 there to secure the room so no one could
6 access --

7 Q. That sheathing here, that I'm
8 indicating in the square?

9 A. It's in the square, but your
10 square is only covering about a quarter of
11 it.

12 Q. Yeah, yeah, this plywood
13 figure, right?

14 A. Yes.

15 Q. Okay.

16 A. You can see the louver door for
17 the furnace right next to it with no fire
18 damage.

19 Q. So you're looking at this
20 louver door here on the left of Figure 46?

21 A. Yes.

22 Q. That was the physical evidence
23 that you looked at?

24 A. Yes.

25 Q. That's also depicted on the

1 J. KARASINSKI

2 right side of Figure 45?

3 A. Yes, with the door open.

4 Q. Right.

5 A. Picture below, it's closed,
6 picture above, it's broken.

7 Q. So on the next picture, we are
8 looking at 47 now. And the caption reads:
9 Fire damage outside office into hallway,
10 red arrow indicates the Hp laptop, do you
11 see that?

12 A. Yes.

13 Q. So the closet that we are
14 talking about is not visible in this
15 photograph, right?

16 A. No, it's not, no. The inside
17 the closet, but that's the closet wall.

18 Q. Right.

19 A. So that's visible, but the
20 inside of the closet and the contents in
21 the closet were not visible.

22 Q. Right, because it's around the
23 corner?

24 A. Yes.

25 Q. Going to page 35, you stated

1 J. KARASINSKI

2 that melted plastic was observed on the
3 laptop screen resulting from downward
4 dripping consistent with the computer being
5 in an open position at the time of the
6 fire. So my question, Mr. Karasinski, is,
7 is it your opinion that the melting was
8 from gradient heat on the open key board
9 and screen?

10 A. Yes. Later on during the fire
11 event, when the heat layer banked down to
12 the approximately four-foot level, yes,
13 that's when it began to melt.

14 Q. You said when the heat layer
15 banked onto that level. So you were saying
16 the hot gas layer would have to come down
17 to the level of the laptop screen?

18 A. No. The heat layer, you'd have
19 radiant heat pushing down, right. So --
20 but, again, I'm not going to get the
21 temperatures great enough to melt that
22 plastic. I have got to have bank -- that
23 heat layer would be banking down. So that
24 occurred later on during the fire event,
25 not at the initiation of that fire event.

1 J. KARASINSKI

2 Q. Then, you say that the -- that
3 there was this -- the damage observed on
4 the laptop was isolated and inconsistent
5 and of greater intensity than damage to
6 other contents in the room. What do you
7 mean by that, Mr. Karasinski?

8 A. So where the battery failure
9 occurred on the back of the laptop, if you
10 look at the picture where the laptop was
11 turned over, you could see the melted
12 plastic, okay, that should have been
13 protected. So that occurred and melted by
14 the battery failure in the unit, not from
15 the radiant heat banking down on the unit.

16 Q. So let's see if there's a
17 picture of the backside for us to look at
18 while we are talking about this.

19 A. There it is.

20 Q. So you're talking about the
21 damage that's depicted on the underside of
22 the Pavilion laptop in Figure 58?

23 A. Yes.

24 Q. Wouldn't you expect this kind
25 of damage whether if a laptop was a victim

1 J. KARASINSKI

2 of a fire or the start of a fire, because
3 it had a battery pack in it?

4 A. Can you say that again, I'm
5 sorry?

6 Q. I'm saying, wouldn't you
7 inspect this kind of damage that we are
8 looking at in Figure 58 whether the laptop
9 was the start of the fire or the victim of
10 the fire because it has a battery pack in
11 it?

12 A. Well, if it was a victim of the
13 fire, this damage would not have occurred
14 until later on during the fire event. So
15 again, we are talking about the timing,
16 right, so as this -- when she sees the
17 batteries expelling from the laptop, that's
18 the incipient stage of a failure. We don't
19 have a heat layer. We don't have radiant
20 heat banking down on this computer.
21 This -- if the computer was a victim of a
22 fire, yes, would the damage be similar, but
23 I don't have the radiant heat layer to this
24 point yet when she discovers the incipient
25 stage of the failure of the batteries of

1 J. KARASINSKI

2 the Pavilion laptop.

3 Q. So, is it fair to say that
4 you're ruling out that the laptop was the
5 victim of the fire, notwithstanding
6 that it could suffer such damage in a
7 thermal attack because of Ms. Marcellin's
8 statements, you have these two
9 possibilities and is you're going for one
10 because of what she said, right?

11 A. Well, no, the physical evidence
12 and what she saw supports that it's a
13 failure of the laptop and it wasn't from
14 radiant heat because she's in the room and
15 she sees it and we don't have radiant heat
16 banking down hot enough to cause this to go
17 into thermal runaway at the time she
18 discovers the fire.

19 Now, again, we talked about
20 timing, but as she's trying to get him out
21 of the house and she's driving down the
22 road to call 911, the fire is still
23 burning, correct, and now that heat layer
24 is banking down, and then that's when we
25 have the damage, the melted plastic and

1 J. KARASINSKI

2 things of that nature to the laptop.

3 Q. I understand what you're saying
4 and I understand and I think these too
5 possible outcomes, you know, the battery
6 could've been attacked by the fire after
7 Ms. Marcellin -- the computer could have
8 been attacked by the fire after
9 Ms. Marcellin left by the hot gas layer, as
10 you're saying, or it could have been
11 earlier and you're saying you ruled out
12 this earlier possibility because of what
13 Ms. Marcellin's testimony, right?

14 A. Based on her observations and
15 the physical evidence that we found
16 supported her statement.

17 Q. Right. So I'd like to focus on
18 the second part of the that. So I know
19 that you relied on her statements which
20 were consistent with this hypothesis that
21 you have, but what's the other physical
22 evidence that you relied upon to make this
23 distinction here?

24 A. The location of where we found
25 the cells, and the absence of any ignition

1 J. KARASINSKI

2 sources within the closet and then the only
3 evidence of an ignition source that we
4 observed in the closet was foil from one of
5 the cells that expended. So everything,
6 it's the totality of all the data that was
7 collected and following the scientific
8 method.

9 So we're still collecting that
10 data based on her observations. They made
11 sense. We are now starting to locate
12 expended material from the cells, a couple
13 of cells that were blown out of the
14 computer. And I have no ignition sources
15 to have a fire in the closet. There's no
16 electric in the closet, there was no
17 compact computer in the closet. There was
18 no vacuum in the closet, the only ignition
19 source that we found in the conceit was
20 foil from one of the lithium ion battery
21 cells.

22 Q. I'm going to go back to
23 page 35. And you say at 35 to 36 that the
24 fire patterns were consistent with fire
25 spreads from the closet to the office. I'm

1 J. KARASINSKI

2 trying to find the exact quote here, but
3 does that generally sound right?

4 A. It does, yes.

5 Q. I'm going to see if I can find
6 that exact quote. But, so I guess, I'm
7 just summarizing it. You're talking about
8 fire patterns, how you observed them. So
9 it's fair to say that it's your opinion
10 that the closet was the secondary fuel that
11 was ignited?

12 A. After the battery failure, yes.

13 Q. So the first fuel was the
14 battery pack, the second fuel was in the
15 closet?

16 A. What are the contents of the
17 closet.

18 Q. What caused the secondary fuel
19 to be ignited?

20 A. The foil from the cells.

21 Q. On page 36, you also states
22 that Mr. Litzinger observed breaker number
23 four tripped and he confirmed that breaker
24 number three provided power to the
25 receptacle the laptop was reported to be

1 J. KARASINSKI

2 plugged into. So my first question, Mr.
3 Karasinski is, did you see the laptop
4 plugged in when you were on your site
5 investigation?

6 A. I would have to go back to my
7 photos, but I believe we did observe it,
8 that it was plugged in at the time.

9 Q. You said it was reported to be
10 plugged, so that's why I'm asking. You see
11 that?

12 A. Correct.

13 Q. So you think you saw it plugged
14 in?

15 A. I believe it's in our
16 photographs, minor at the scene.

17 Q. Mr. Litzinger, he testified
18 about this. He said he didn't analyze or
19 trace the only trip circuit breaker which
20 was number four, despite the fact that it
21 would've been tripped by either an
22 electrical event or local investigators.
23 So my question is, how did you rule out an
24 electrical event at breaker as an origin
25 and cause investigator?

1 J. KARASINSKI

2 A. There was no fire damage at
3 breaker number four at the panel.

4 Q. Do you know what breaker number
5 four went to?

6 A. I believe they tried to trace
7 it. Again, that was outside my scope. I
8 wasn't there to do that, but I believe they
9 tried to trace it. And they couldn't trace
10 it. They were getting too much feedback
11 from their circuit tracers that they were
12 trying to use. I think they tried to use
13 two or three different circuit tracers.

14 And then, the other issue too,
15 when they were doing that, some -- when
16 you're doing that, sometimes, you have to
17 unplug things, because that could give you
18 the spec the back feeding in it, but they
19 were unable to trace that to determine
20 exactly where it went.

21 Q. You don't think that's a data
22 gap in respect of your origin and cause
23 analysis?

24 A. No. I had -- we had no arcing
25 in our -- in the room of origin and that

1 J. KARASINSKI

2 breaker was not in the trip position. So
3 based on that and no arcing on the cords to
4 the computers, those were the only circuits
5 that were exposed to the fire event in that
6 room. So those were the first ones that
7 would be susceptible to being attacked by
8 fire.

9 Q. Well, it says right here that
10 breaker number four was tripped, right?

11 A. I was talking about breaker
12 number three that we traced that went back
13 to the room of origin.

14 Q. I'm talking about number four,
15 which is the only tripped one.

16 A. Correct, we didn't find any
17 electrical activity in the room of origin.

18 Q. From number four?

19 A. I don't know if number four
20 went to -- we don't know where number four
21 went.

22 Q. Wouldn't you like to know where
23 number four went if there was an electrical
24 event at that the receptacle that
25 corresponded with number four?

1 J. KARASINSKI

2 A. I don't know if it was an
3 electrical event. Like I said, it could be
4 tripped from heat, they can trip from
5 thermal heat. They can trip if a fireman
6 or somebody's touching something, they can
7 trip. They can trip if you shut the door
8 too hard, if you bump against it, there's
9 multiple reasons that they can trip.

10 The room of origin did not have
11 any electrical activity in it. We traced
12 that breaker back. We confirmed it was
13 breaker three. Our room of origin did not
14 have any electrical ignition sources
15 besides the computer.

16 Q. So even though this was the
17 only one that was tripped, and I can
18 represent to you, Mr. Litzinger said that
19 he ruled out heat exposure as a possible
20 trip, he testified that the two
21 possibilities were that a local first
22 responder or investigator had bumped it as
23 you suggested or there was an electrical
24 event, so that's what he testified to.

25 A. No, understand that. I was

1 J. KARASINSKI

2 just giving you examples on what could
3 cause them to trip.

4 Q. Right. And I'm saying, because
5 you didn't see evidence in the -- what you
6 concluded was the room of origin of an
7 electrical arc or other signs of electrical
8 ignition, you didn't think it was necessary
9 to figure out what, if anything, happened
10 at circuit breaker number four?

11 A. No, we observed it. We
12 documented that it was in the off position,
13 and we even collected it and that's what we
14 have and there was no electrical activity
15 in the report.

16 Q. You didn't collect it though,
17 you only collected number three, right?

18 A. I'm sorry, number three, sorry,
19 we documented number four.

20 Q. Would you have collected number
21 four?

22 A. When we didn't find any
23 electrical activity, at that point, it was
24 just a data point at that time and it still
25 doesn't have any meaning to us as it

1 J. KARASINSKI

2 pertains to cause for the this fire event.

3 Q. Number four could have gone to
4 the office, right?

5 A. I don't think so. I don't
6 think that's the way it was running.

7 Q. But you don't know as you sit
8 here today that it could or couldn't have
9 gone there, right?

10 A. Again, that was outside my
11 scope. Andy was retained to do the
12 inspection of the electrical system.

13 Q. Page 41, okay. At Figure 56,
14 we have the image of the notebook and it's
15 your testimony that the melting on the
16 keyboard that we are looking at was damaged
17 from the fire attack after Ms. Marcellin
18 fled the residence, right?

19 A. Not fire attack. Radiant heat.

20 Q. Radiant heat, thank you. Would
21 the presence of a hot gas thermal lighter
22 damage the laptop's battery?

23 A. Once that heat layer got low
24 enough -- got closer to the laptop, yes.

25 Q. How low do you think the heat

1 J. KARASINSKI

2 layer has to go to damage the laptop?

3 A. Probably maybe a foot above
4 where it is now, probably start to see
5 melting on that laptop.

6 Q. So a foot above the laptop,
7 that's when you'd see the melting?

8 A. No, I said a foot above the
9 heat layer that we have marked it on in my
10 report. If it was approximately, three
11 feet, a foot higher than that is probably
12 when you would start to see melting to this
13 laptop.

14 Q. So, you know, like, a foot
15 higher than this red line in Figure 49?

16 A. Yes.

17 Q. Okay.

18 A. So at the incipient stage of
19 the fire in full room involvement of that
20 closet, based on the quick calculations I
21 did, we're looking at a heat layer of the
22 ceiling layer within two minutes of full
23 room involvement of the closet and 700 F.

24 Q. So, yes, I did very next photo,
25 Figure 57. So I'm looking at the damage,

1 J. KARASINSKI

2 that's the red highlighted circle of the
3 battery remains and the damage that's
4 depicted in this close up and my question
5 is, would you have expected the Hp laptop
6 to have been even more damaged if it
7 started the fire?

8 A. No.

9 Q. So, you wouldn't expect cracked
10 screen?

11 A. No, I have -- we have had
12 laptop fires that is -- that the batteries
13 had failed and didn't ignite anything and
14 all extended out of there and there was no
15 cracking to the screen. There was no
16 melting to the unit. It was only melted on
17 the bottom.

18 Q. Right. But those weren't cases
19 where it started a big fire, right?

20 A. Well, correct. That's what I'm
21 saying. So I've seen it both ways. I've
22 seen it where it's really bad when it did
23 start a fire, because there were
24 combustible materials that ignited in an
25 adjacent to it. Or in this case, it didn't

1 J. KARASINSKI

2 ignite anything in an adjacent to this
3 computer, and you can see from the other
4 areas, you can actually see, I think
5 there's one solid laying on the ground
6 where you can see you can see the singed
7 carpet in front of it because it was still
8 expelling as it landed on the floor.

9 Q. So in Figure 59, that's one of
10 the pins that you were just mentioning,
11 right?

12 A. I don't believe that that's
13 where that was found, but that's where it
14 was the day we got there. I believe that
15 was probably put there by the NEFCO Fire
16 Investigators.

17 Q. This is the intact cells?

18 A. I don't recall. You'd have to
19 ask Mr. Martin with an intent. But if you
20 go down in one of my photographs, you can
21 see a cell laying on the carpet, that one
22 right there. So you can see where the
23 singed carpet.

24 Q. Yes.

25 A. After expelled its contents, it

1 J. KARASINSKI

2 was laying on the carpet.

3 Q. So looking at the cells
4 depicted in Figures 59 and 60, did you do
5 anything other than the CT and X-ray test
6 that we talked about to test them or
7 inspect them in any way?

8 A. Again, that's a question for
9 Mr. Martin.

10 Q. Now, these two that we are
11 looking at Figures 59 and 60, is it your
12 opinion that these battery remains ignited
13 the secondary fuels in the fire?

14 A. Batteries in the picture, no.

15 Q. At Figure 60, I guess it was
16 exhumed by my last question, are you saying
17 that this battery ignited the secondary
18 fuel to the fire?

19 A. No, I'm just using that -- I'm
20 just using that as an example, after it
21 blew out of the laptop, still producing
22 flaming combustion. That's why you can see
23 the singed marking on the carpet, correct.

24 Q. That's the charring that I've
25 drawn a box around this -- to the top left

1 J. KARASINSKI

2 of the battery remains depicted in this
3 Figure 60?

4 A. Yes.

5 Q. Does it look like the carpet
6 was ignited in the flames there?

7 A. No.

8 Q. Just charred, right?

9 A. Just charred. But carpet has
10 fire ambers in it. So it will -- and
11 again, when we are talking about the -- you
12 had a very good question about the fuel
13 configuration, right, we have to remember
14 that this is horizontal, right. So as soon
15 as the flaming combustion completes or
16 finishes with this cell, if it did ignite
17 the carpet, it would self-extinguish.

18 Q. The configuration -- the
19 explanation you gave on configuration makes
20 a lot of sense in the example that you were
21 describing, but could you -- I'm having
22 trouble squaring it with -- the image I
23 have in my layman's mind of radiant heat,
24 okay, you're lying on the beach, you didn't
25 wear suntan lotion, you didn't wear a hat,

1 J. KARASINSKI

2 you know, maybe your back heats up a little
3 bit but it's protected. It's your front
4 that's completely scorched, right, from top
5 to bottom, I'll be red. If I do the exact
6 same day, exact same situation, but I'm
7 just walking around, right, it's going to
8 be my nose, my face, my shoulders,
9 everything that's, you know, exposed to the
10 sun, that's what goes to get burned the
11 most.

12 So to me, it looks like in the
13 example of the sun as radiant heat, the
14 horizontal item is getting more damaged
15 rather than the vertical. So I understand
16 what you're saying, but could you out
17 square these two -- the problem I'm having
18 if I'm even articulating it in any way to
19 you?

20 MR. SCHWARZ: I'm going object
21 to the form. I'm going object to the
22 form of that question, because you're
23 talking about radiant heat and UV
24 radiation which are different, but
25 you can answer, if you can.

1 J. KARASINSKI

2 THE WITNESS: I can't. That
3 was a long winded question.

4 Q. I understand I'm hoping --

5 A. From this picture, all I'm
6 trying to show is that when the cell
7 expelled from the laptop and landed in this
8 position, it was still producing flaming
9 combustion coming out of the cell and
10 that's what produced the charring to the
11 carpet.

12 What I was saying is, this cell
13 did not ignite the carpet because of it's
14 configure, steel configuration, right,
15 because the carpet on the floor is
16 horizontal, and the carpet also has fire
17 ambers in it. So once this cell expelled
18 all of its materials and extinguished, it
19 didn't do anything.

20 Q. Looking at figures 63 and 64
21 here which show the breaker, The Vaca
22 Circuit breaker and the system breaker
23 along with the X-ray, and my question is,
24 Mr. Karasinski, did you want an X-ray for
25 that one circuit breaker that was tripped?

1 J. KARASINSKI

2 A. No, we didn't need it because
3 we found no electrical activity in our room
4 of origin.

5 Q. Is it the same answer for
6 whether you attached any significance to
7 the fact that this panel had been recalled
8 by the manufacturer?

9 A. No.

10 Q. It's not the same answer?

11 A. No, I mean, just because the
12 panel has got a recall, doesn't mean it
13 started a fire. And we have no fire in the
14 area in the panel, so it's just, like, any
15 piece of equipment that you have in your
16 house that's got a recall, it doesn't mean
17 it automatically is going to start a fire
18 and catch on fire the next time you use it.
19 It may never catch on fire even though it
20 was recalled.

21 Q. Yeah, I understand that. I
22 just asked you about a circuit breaker
23 number four, you said because it was not,
24 you know, it was not consistent with your
25 findings in respect of electrical activity

1 J. KARASINSKI

2 that's why no further under investigation
3 was undertaken. And my question is, if you
4 learned that the panel itself was recalled,
5 is that, you know, would that warrant any
6 additional investigation in your mind? And
7 I think you just said, no, is that fair?

8 A. That's fair because there's no
9 -- if the fire was originating here or we
10 had an issue that something was not working
11 in the panel or the fire originated here,
12 then absolutely, we would address that, and
13 we would be looking at that. And I
14 understand that Federal Pacific has a
15 recall.

16 Q. So the circuit breaker number
17 four, the recall, the panel, that's not
18 relevant to your analysis in this case?

19 A. No, and the occupants didn't
20 provide any issues with any of the breakers
21 tripping or having any issues with any
22 electrical problems in the structure.

23 Q. Well, we know at least one was
24 tripped, whether it was from an electrical
25 event or a local fire department person,

1 J. KARASINSKI

2 right?

3 A. Correct.

4 Q. On page 45, you state that the
5 failure of the Hp Pavilion laptop system to
6 include the battery pack resulted in the
7 injection of hot battery material that
8 ignited combustible located within the room
9 of origin including the closet, so I'm
10 describing a break that -- first of all,
11 did I read that correctly?

12 A. Yes.

13 Q. I'm going to break this one
14 down at a time. So, is it fair to say
15 based on reading this that you don't know
16 what part of the Pavilion system including
17 the battery pack failed?

18 A. Again, that was for Mr. Martin
19 to handle.

20 Q. Then you say that a hot battery
21 material was injected. What material was
22 ejected?

23 A. So you can inject multiple
24 items out of there, but typically, from the
25 testing that we've done is the foil, is a

1 J. KARASINSKI

2 very competent ignition source. So I mean
3 there's multiple things in there. You've
4 got safety events, you've got gaskets,
5 you've got crimps. There's other material
6 that's shooting out, but typically, that
7 foil is going to retain enough energy and
8 sufficient heat to ignite combustible
9 material. Did I lose you?

10 Q. No, I'm just making a note.
11 I'm just making a note that you send that
12 in a way that was very clear. So I was
13 just trying to make a note of it. So you
14 -- is it fair to say that multiple kinds of
15 battery material were ejected here then?

16 A. Yes.

17 Q. But you believe it was the foil
18 that ignited the secondary fuels in this
19 case?

20 A. I believe the foil is the most
21 competent ignition source when the battery
22 injects its materials.

23 Q. You believe it's the most
24 competent ignition source in this case as
25 well?

1 J. KARASINSKI

2 A. Yes, and we found that in the
3 closet area which is the secondary fuels.

4 Q. So it was the foil, it wasn't
5 the jelly roll, the caps or these other
6 components you were talking about?

7 A. Well, the foil is the jelly
8 roll. That's what it looks like after it
9 fails.

10 Q. Right. But the foil can come
11 out. It can be like confetti, right, or it
12 could be injected like a slug too, right?

13 A. Yeah, or sometimes, it doesn't
14 come all the way out, and it looks like --
15 I don't you know how to describe it, a half
16 eaten popsicle on the way out.

17 Q. Right. Right. Rocket top,
18 yes. So, is it fair to say that this is in
19 the confetti category, the ignition that we
20 are talking about here?

21 A. No, it was a pretty it was a
22 pretty large piece of jelly roll foil that
23 we found in the closet.

24 Q. So it was more like a slug.

25 A. Yes.

1 J. KARASINSKI

2 Q. Where it's injected in its
3 entirety?

4 A. Yeah, I've not heard it call
5 slug before, but, yes, if that's what you
6 want to use.

7 Q. That's what I have been calling
8 it because of the case and the contents,
9 it's just, I don't know, visually, it makes
10 sense to me, but no, it's not scientific at
11 all.

12 A. As long as we both agree on
13 what we are calling it, that's fine.

14 Q. Then you said that the hot
15 battery material ignited combustibles, what
16 combustibles.

17 A. So if you look at the
18 photographs and you go back to the hallway
19 or the photographs of the yarn at the
20 process, you can see that there were towels
21 in there, were clothes in there, there was
22 yarn in there stored on the floor level.
23 There was a plastic stool that you can see
24 in the hallway that was in that closet, it
25 had multiple clothes, towels, so there was

1 J. KARASINSKI

2 plenty of combustible material in there
3 that could have landed on it and ignited.

4 Q. So you named a couple of
5 different things, do you have an opinion as
6 to what was the secondary fuel in this
7 case?

8 A. Just the combustibles that were
9 stored in the closet.

10 Q. So you can't say whether it was
11 the towels or the clothes or the yarn or
12 the plastic stool?

13 A. No, it was all -- it was moved
14 prior to my inspection.

15 Q. Don't you ordinarily ask to
16 identify the combustible that ignited in a
17 fire investigation?

18 A. I am identifying the
19 combustible. The combustible materials
20 that were stored in the closet.

21 Q. But I guess I'm asking, would
22 you ordinarily go for a greater level of
23 detail, meaning identifying whether it was
24 the towels, clothes, yarn, stool or some
25 other thing?

1 J. KARASINSKI

2 A. Based on the material that was
3 in that closet, I'm comfortable with the
4 combustible materials in there because of
5 the clothing the towels, the -- like I
6 said, the yarn, the sewing items, and that
7 is -- that -- your slug can ignite those
8 materials. I don't know how they were
9 stacked in there. I don't know what was on
10 the bottom of the towels or on the bottom
11 or the sheets were on the bottom or the
12 comforter was on the top. I don't know the
13 answer to that.

14 Q. So, is it your opinion that the
15 slug that we will call it, was competent to
16 ignite everything that was in the closet?

17 A. Of the material I just listed
18 to you, yes.

19 Q. Yes, everything, meaning the
20 towels, the clothes, the yarn and the
21 plastic stools?

22 A. Yes. Yes.

23 Q. So that's why --

24 A. Not the plastic stool, but yes,
25 the clothing, the towels, the sheets, the

1 J. KARASINSKI

2 combustible materials that she had stored
3 in there, yes. That's what supplied
4 sufficient heat and entity to ignite any of
5 those combustibles in the closet.

6 Q. Did you know, were they all
7 cotton, were they all synthetics, was there
8 some kind of mix?

9 A. There appeared to be a mix to
10 me. There was a couple of bags in there
11 that appeared to be synthetic. There were
12 towels which appeared to be cotton made,
13 the receipts in there, so...

14 Q. Now, you said in the room of
15 origin including the closet, so my question
16 is, were the secondary fuels ignited in the
17 closet or somewhere else?

18 A. The secondary fuels were
19 ignited in the closet and that's fire event
20 is the closet. The expended batteries
21 besides the damage melting and fire damage
22 you see to the bottom of the laptop and the
23 top the laptop from the failure of the
24 cells, right, to tell you that fuels and
25 then the other areas where we found cells,

1 J. KARASINSKI

2 we did not -- those cells did not produce
3 enough heat and energy to cause a fire
4 somewhere else in that room.

5 (Whereupon, a break was taken.)

6 Q. Mr. Karasinski, we left the
7 last -- we left after we were discussing
8 the combustibles in the closet, right?

9 A. I believe so, yes. Unless you
10 want her to read back the last question and
11 answer.

12 Q. That no, that's okay. So you
13 state that --

14 A. Can we go back with your ear
15 buds?

16 Q. Is that better?

17 A. It's much better when you got
18 your earbuds in, thank you.

19 Q. So I'm looking at let's see,
20 okay, so you see here, the highlighted
21 section under your cause to determination
22 analysis?

23 A. Can you turn your volume off on
24 your computer because now I'm getting
25 feedback. Sorry about that, not trying to

1 J. KARASINSKI

2 be difficult, I got a bad echo.

3 Q. Is that better?

4 A. Yeah, that's fine.

5 Q. Do you see the highlighted text
6 and their cause determination analysis, Mr.
7 Karasinski?

8 A. Yes.

9 Q. Can you read that to yourself
10 and let me know when you've do so.

11 A. Your highlighted section is
12 covering a couple members.

13 Q. Of course, that would be a
14 little bit easier, wouldn't it? I'm trying
15 to just highlight this beginning with
16 Ms. Marcellin to the word "retreated," do
17 you see that. So Ms. Marcellin through
18 retreated.

19 A. Okay.

20 Q. So Ms. Marcellin stated that it
21 was too big for her to extinguish, so she
22 would be retreated and my question is, how
23 long would it take for the fire that you
24 alleged start in the Hp computer to be too
25 big to be extinguished?

1 J. KARASINSKI

2 A. Well, I don't agree with that
3 timeline, so what I -- what I'm saying is,
4 you've got the computer igniting and with
5 the battery itself failing and injecting,
6 those injected components, one of foils
7 landed in the closet and ignite in those
8 combustibles. The closet it ignited, which
9 caused the further damage.

10 Q. So, how long would it take for
11 the fire to -- that was ignited by way of
12 secondary fuel in the closet to become too
13 big to extinguish.

14 A. Extinguish with what?

15 Q. With what Ms. Marcellin
16 testified that she was using which was a
17 handheld extinguisher.

18 A. So typically, when we do light
19 burns, our burns sells, typically usually
20 10 by 10 or 12 by 12, so and I'm giving you
21 as an example from a large burn fire and
22 testing what we have done, that we can
23 ignite with an open flame a 12 by 12
24 structure burn pot room and contents,
25 whatever you want to call it, we can ignite

1 J. KARASINSKI

2 that with an open flame and I can typically
3 get that room through a full room
4 involvement and flashover in less than four
5 and a half five minutes.

6 So when that closet finally got
7 to full room involvement, she was not going
8 to be able to extinguish that with a fire
9 extinguisher.

10 Q. But to get to that full room
11 involvement where no handheld extinguisher
12 is going to put it down, we're talking less
13 than 4.5, 5 minutes?

14 A. Yes.

15 Q. Would it be less than four
16 minutes?

17 A. It could be, it depends on, you
18 know, door opening, ventilation, it depends
19 on, you know, are those windows really
20 airtight. It's a trailer, right, so, you
21 know, nothing really in a trailer is going
22 to be airtight and settled.

23 So again, I'm giving you all
24 the burnt pots that I've found at The
25 National Fire Academy down at Cedar for ATF

1 J. KARASINSKI

2 and local law enforcement and the burn top
3 that I have done through training
4 throughout my career. We can typically get
5 that room, just room and contents to flash
6 over in less than four and a half, five
7 minutes.

8 So we have got -- this is a
9 much smaller room, right, it's -- you've
10 got -- so you were going to have more
11 radians. You've got corner configuration,
12 you've got your horizontal configuration.
13 So, you know, I'll stick to the four and a
14 half five minutes, but that's probably a
15 good amount of time, because maybe when it
16 got there, it was smoldering for a little
17 bit first, producing smoke before then
18 reached to an open claim. I just don't
19 know, right. We weren't there, so I can
20 give you four and a half to five minutes is
21 a typical burn time, that we got full-time
22 room involvement and flash over on the burn
23 cells that I've burned through the
24 trainings I've done over the years.

25 Q. Understood. So we talked a

1 J. KARASINSKI
2 little bit about the secondary combustible
3 fuels in the closet. And I think your
4 testimony was essentially that the injected
5 jelly roll, the slug that we're calling it,
6 was competent to ignite any of the
7 materials, specifically being the towels,
8 clothes, linens, and yarn. So, is it fair
9 to say that because of that opinion, you
10 did not conduct any analysis of the
11 flammability ratings of those various
12 materials.

13 A. They were already burned, so at
14 that point, they're -- they've changed
15 their state. So to take that, they've
16 already been heated and cooled, so they're
17 not in the same -- they're not the same
18 material that they were prior to the fire,
19 so...

20 Q. What were the limitations of
21 the ignition source for the secondary
22 fuels, meaning that jelly roll?

23 A. What do you mean by
24 "limitation"?

25 Q. Whatever limitations there

1 J. KARASINSKI

2 might be in whatever way you might
3 understand that.

4 A. I mean, based on my knowledge
5 and the -- and causing the battery packs to
6 fail and burning down from fire to pack in
7 thermal pack, we see the jelly roll on
8 fire, shooting across room. I've actually
9 seen an 18650 sticking into drywall, so it
10 can go and it can be protected anywhere at
11 a high rate, and then if it's hitting the
12 ceiling, it's not just going to just hit
13 the ceiling and bounce straight down. It
14 could bounce to the left, could bounce to
15 the right, could come straight down. It
16 could go anywhere.

17 Q. So, is it fair to say that the
18 energy potential of the jelly roll eject
19 its variable from thermal runaway to
20 thermal runaway?

21 A. I don't understand that
22 question. Thermal runaway to thermal
23 runaway?

24 Q. Yeah, when you're looking at
25 different cases thermal runaway, like the

1 J. KARASINSKI

2 one in this case or one you just mentioned,
3 you know, jelly roll lodged in the
4 driveway?

5 A. What was the question then
6 again?

7 Q. My question is, the energy
8 potential of the jelly roll is different in
9 every case?

10 A. Oh yeah, it's going to depend
11 on the size. I guess, I'll use your term
12 that you use, that we agreed on, a slug.
13 So if it comes out as like the other word
14 used, confetti, that's going to have less
15 energy, less thermal mass, so with a less
16 energy and less thermal mass, it's going to
17 be less likely to ignite combustible
18 materials. But now, you've got the slug
19 issue, right, you've got more mass, you've
20 got more energy and it's going to maintain
21 that heat energy longer than something of a
22 much smaller mass, like what you used to
23 use, for example, with the foil as
24 confetti.

25 Q. I'm looking at 1911 which you

1 J. KARASINSKI

2 cite at page 46. Do you see that there?

3 A. Yes.

4 Q. That directs that the factors
5 to be considered in determining fire cause
6 include a competent ignition source, the
7 type and form of the first and I'll add
8 here secondary fuel in this case and the
9 circumstances such as failures in human
10 actions that allows the factors to come
11 together and start the fire.

12 So we've talked about ignition
13 sources, we have talked about first and
14 secondary fuel, we talked about failures,
15 my question is, what human actions did you
16 consider, if any, in this case?

17 A. So in this case the human
18 factors would be because she was sleeping,
19 was that laptop being used improperly, was
20 that -- was the laptop not the correct
21 charger, what was going on with that laptop
22 at the time? So that would be those other
23 human factors that we would need to
24 investigate.

25 Q. How did you investigate those?

1 J. KARASINSKI

2 A. Which part?

3 Q. The human factors we just
4 talked about, specifically being misused to
5 the laptop.

6 A. We determined that the again,
7 this is Mr. Martin's area, but I can talk
8 to it in general terms, right, but the
9 cord, I believe, Mr. Martin determined that
10 the charger that she was using was the
11 proper charger for that computer. So it
12 wasn't -- a lot of people will use the
13 incorrect charger, right, you find that a
14 lot of you do battery defense cases. You
15 find that a lot especially with power
16 tools, people will use the wrong charger,
17 but hey, if -- what was the OJ Simpson? If
18 the glove doesn't fit, you must quit,
19 right. So you if it fits, people are going
20 to use it. So, through that, the human
21 factors Steve went through and determined
22 if the charger was the proper charger that
23 she was using, so it wasn't overcharging
24 those cells.

25 We went to the extent of

1 J. KARASINSKI
2 identifying the battery pack that it was,
3 again, human factors, there was a
4 replacement battery pack. So those are
5 things we investigate. But that
6 investigation, remember, I said earlier, we
7 follow a scientific method. You're always
8 in that data collection phase, getting this
9 data, and in this case the human factors
10 what you've asked about to finally get to
11 that part where we can develop a
12 hypothesis, test a hypothesis, and then
13 select the final hypothesis.

14 Q. Then, right below this, you'll
15 see you mentioned Section 19443, do you see
16 that?

17 A. Yes.

18 Q. It says 14443 concerns ignition
19 sequences and times when there is no
20 physical evidence of the ignition source.
21 Did I read that correctly?

22 A. Yes.

23 Q. So in your expert opinion,
24 there was no evidence of the ignition
25 source found in the room of origin?

1 J. KARASINSKI

2 A. What do you mean? We've been
3 talking about batteries since 8 o'clock
4 this morning.

5 Q. I apologize, I'm not -- I'm not
6 trying to -- I'm missed it too, that's why
7 I'm asking, this section talks about cases
8 when there's no physical evidence of
9 ignition source.

10 A. Well, if you read --

11 Q. So I'm asking, you know, what
12 what's this doing here in terms of your
13 report?

14 A. So if you read down further,
15 it's saying that, so let's say it was --
16 someone used gasoline and they ignited the
17 gasoline and there's no evidence of the
18 gasoline bag, but you get a positive
19 sample, you can infer what that ignition
20 source would be.

21 So in this case, I didn't need
22 to infer anything because we didn't --
23 there was no computer in a bag in that
24 closet, there was no vacuum, oven, in that
25 closet, there are no outlets. The only

1 J. KARASINSKI

2 ignition source that we found was your slug
3 material from the battery that it expelled.

4 Q. So it's fair to say that this
5 first part of the section, you're saying,
6 you applied 19443 in times when there's no
7 physical evidence of the ignition source
8 from the origin. That wasn't -- you didn't
9 apply that to your analysis, because in
10 your view there was physical evidence of
11 ignition, right?

12 A. Right, but I included in this
13 section because of the material that was
14 not found in the closet.

15 Q. Okay, okay. That makes sense.
16 And so, that section goes on to say that --
17 where is it --

18 A. Yeah, I just gave you an
19 example in all.

20 Q. The testing alternate
21 hypotheses regard involving potential
22 ignition sequences provided that the
23 conclusion regarding the ignition sequence
24 is consistent with all known facts. So
25 this is what you were just telling us

1 J. KARASINSKI

2 about, right? You looked, there was no
3 contact in the closet. There was no
4 receptacle in the closet, etcetera, right?

5 A. Correct, and that's how we were
6 following the scientific method and
7 developing that hypothesis. We're going
8 through and we are going that data
9 collection stage out of those seven steps
10 of the scientific method to get down. So
11 all known facts, there were no ignition
12 sources found in that closet except for
13 your slug jelly roll material.

14 Q. Now, I'm going to pull up that
15 picture later, so we can actually have a
16 more inform conversation, but I just want
17 to talk more generally about it with you
18 now.

19 On this, 19443, I looked at it
20 up, and it looks like they provide a
21 nonexclusive list of examples of situations
22 that lend themselves to formulating an
23 ignition scenario when the ignition source
24 is not found during the examination.

25 Now, I was going to ask about

1 J. KARASINSKI

2 these, but it sounds like because you have
3 did find an ignition source and you are
4 offering an opinion in respect of that,
5 this list may not apt here, is that right?

6 A. The list may not be what, I'm
7 sorry?

8 Q. Apt or, you know, appropriate
9 to discuss.

10 A. Well, yeah, but again, I
11 included this section because the
12 information that was provided about these
13 other pieces of potential admission sources
14 that were in the closet were physically not
15 there. So that's why I included this
16 section.

17 Q. Then, you see, it lists some
18 potential ignition sources on page 46 and
19 47?

20 A. Yes, sir.

21 Q. So I'm just going to -- we
22 talked about a couple. So you list here,
23 building electrical system, lightning,
24 smoking materials, handled incense and
25 incendiary, did you consider any others?

1 J. KARASINSKI

2 A. That was all I could consider
3 based on my room of origin, I didn't find
4 any other potential ignition sources room
5 of origin.

6 Q. How did you dial in on the room
7 of origin?

8 A. Well, again, we dialed in on
9 the room based on 19421. I would say
10 there's three pillars, fire patterns,
11 witness statements and fire dynamics, puts
12 us in that room. So we talked about that
13 at length earlier.

14 Q. Of course, yeah. Now, the
15 reason I'm asking about the room of origin
16 thing is we are, you know, you said it was
17 all -- those were the only things you can
18 consider based on the room of origin. So,
19 I guess, my follow-up question is, did you
20 do an arch survey of the whole house?

21 A. Again, that's a question for
22 Andy. That was his scope, not mine. But
23 we did expose everything in that office
24 space to look for arcing in an arc event
25 and we didn't find any. And sometimes,

1 J. KARASINSKI
2 that happens in fires just because I
3 actually -- and it's funny you mentioned,
4 because I actually -- it's funny you
5 mentioned that because I actually am the
6 taks group chair for the arc survey and arc
7 methane section of 921, right, so
8 sometimes, you can get into a fire event,
9 you can seven or eight trip breakers, but
10 you may only find two or three trip
11 locations. You're not always going to find
12 them and if you don't find them, it either
13 means somebody manipulated the panel and or
14 shut it off or somebody did something or
15 bumped up against it and shut it off, so
16 there are reasons you don't ever --
17 sometimes you don't find arcing.

18 Q. You shouldn't eliminate a
19 potential addition source just because
20 there's no obvious evidence for it, right?

21 A. No. It's again, it's through
22 that entire data collection stage of the
23 scientific method.

24 Q. Are devices that are heat
25 producing or capable of heat production

1 J. KARASINSKI

2 when they sustained a failure, those are
3 should be on your list of hypotheses,
4 right?

5 A. Well, I have got laptop there,
6 that was the only appliance that was in the
7 room that was plugged in.

8 Q. Were there any other devices
9 that were heat producing or capable of
10 producing heat?

11 A. Not that had fire damage or
12 failure to it.

13 Q. Have you heard of the heat and
14 flame vector technique?

15 A. Say again, what was the term?

16 Q. The heat and flame vector
17 technique?

18 A. I have not heard of that.

19 Q. Did you do a heat and flame
20 vector diagram in this case?

21 A. I did not. I didn't feel it
22 was necessary.

23 Q. When would it be necessary?

24 A. Well, I guess, one of the
25 reasons it wasn't necessary is because when

1 J. KARASINSKI

2 we were on site, all the experts agreed
3 that the office was a room of origin. So
4 at that point, I didn't need to did a
5 vector analysis to show to support that
6 when we all agreed that the room of origin
7 was the office. Even Greg Gorbit
8 [phonetic] agreed that the room or origin
9 was the office.

10 We asked that every time, Mr.
11 Gorbit didn't ask for any evidence anywhere
12 else in the house. We asked, is there
13 anything else that someone wants to collect
14 as evidence? Everyone agreed that no,
15 because everyone agreed the room of origin
16 as the office. The answer was yes, I
17 didn't need to do a vector analysis because
18 all the experts agreed.

19 Q. But even if all the experts
20 disagreed with you and they all said, no, I
21 actually think it started in
22 Ms. Marcellin's bedroom, would that change
23 your conclusions in this case?

24 A. If someone did not agree with
25 my area of origin, then we would have

1 J. KARASINSKI

2 processed the area that they felt was the
3 origin too. And if I had a discrepancy on
4 origin, then I would -- I could have put
5 together a vector analysis. But again,
6 19921 is a guide. I don't have to do
7 everything as to the guide. This document
8 is an advisory, I don't have to do a vector
9 analysis if I don't believe that it's going
10 to support my file when everybody agreed,
11 even your expert agreed that the room of
12 origin was that office space.

13 Q. I understand that. I'm just
14 trying to focus on your efforts, because I
15 understand that what you found there was
16 consistent with what everyone else was
17 finding. But you were doing your own
18 homework, right, you were doing your own
19 science that day?

20 A. Of course.

21 Q. What their saying, it wasn't
22 steering you one way or the other, I
23 assume?

24 A. Not at all, but again, I'm
25 here. I'm not a case-maker, right, I'm a

1 J. KARASINSKI

2 truth seeker. So if someone had an
3 objection or believe that the origin could
4 be in a different spot, that's why we asked
5 that question, because I want everybody
6 that had that ability to collect the same
7 data that I have.

8 Q. That's why you looked at other
9 possible rooms of origin, right?

10 A. I inspected the entire
11 structure, yes.

12 Q. You personally ruled out the
13 other rooms?

14 A. Yes.

15 Q. I'm looking at page 47, Mr.
16 Karasinski, where you say that you
17 considered candles, and we looked at -- and
18 you said no evidence of candles was found.
19 We've looked at the picture together, the
20 candles, so having seen that picture of
21 those bird candles, does that change your
22 opinion at all that I've highlighted here?

23 A. No, these are items within the
24 area of origin. The candle that you show
25 production of is in the living room.

1 J. KARASINSKI

2 Q. That's why you don't list the
3 electric couch here either, not in the room
4 of origin?

5 A. Correct.

6 Q. Did you consider it at all as a
7 potential ignition source during your
8 initial investigation before you arrived on
9 the room of origin?

10 A. Yeah, I consider everything at
11 the scene as evidence. So once we do our
12 scope and our systematic approach and get
13 our documentation done, then we start
14 talking as experts to see what the plan is,
15 what everyone thinks, and then I tell them,
16 okay, I believe that's area of origin based
17 on, you know, everything that we have seen
18 and based on the witness statements and
19 based on what the fire department's
20 response was and what they stated in their
21 interviews. Everyone agreed that the
22 origin was the office and had nothing to do
23 with anything the living room.

24 Q. You stated that there was a cat
25 at the house and my question is, did you

1 J. KARASINSKI

2 ever consider that the cat might have been
3 involved in the fire in any way at all?

4 A. No. What do you mean?

5 Q. Until Mr. Litzinger told me he
6 worked on a case where the cat knocked over
7 a candle and started a fire. That's the
8 only reason I'm asking you, did you
9 consider it at all?

10 A. Well, I considered that there
11 was a cat in the structure and then that
12 could be a possibility, but there were no
13 candles lit in the office or the origin.
14 So, no, at that point, I did not consider
15 -- yeah, you see it on TV and YouTube,
16 right, you can get on YouTube and watch the
17 dog turn on a stove.

18 Q. Yeah. I mean, when I have a --
19 when I lighter romantic candle on the
20 dinner table, the cat is very intrigued
21 every time, I have no idea why.

22 A. We didn't need to know about
23 the romance part, but that's all right.

24 Q. You didn't physically
25 investigate the furnish beyond what we

1 J. KARASINSKI

2 talked about with the door, the louver door
3 and the interior door?

4 A. What do you mean "I didn't
5 investigate it anymore"?

6 Q. I'm saying beyond what we
7 talked about earlier, how you opened up the
8 door, you didn't see damage and charring,
9 was there anything beyond that you did to
10 rule the furnish out?

11 A. No, it wasn't the area of
12 origin. Everyone agreed and we even asked
13 if anyone wanted the furnace and nobody
14 wanted that as evidence.

15 Q. But if you had wanted it, you
16 would have taken it?

17 A. Yes, but I had no interest in
18 it. We had eliminated it based on the
19 witness statements, fire patterns and fire
20 dynamics. It was not the area of origin.

21 Q. We talked about -- we have
22 here, incendiary, no evidence that fire
23 patterns support incendiary fire. What's
24 an incendiary fire?

25 A. An incendiary fire is a fire

1 J. KARASINSKI

2 that someone sets when they know it's not
3 supposed to be -- there shouldn't be a fire
4 there. So with an incendiary fire, we
5 didn't -- there was -- we didn't see any
6 patterns to support any flammable liquid or
7 ignitable liquids that were on board
8 somewhere and intentionally started. We
9 didn't see any of that.

10 Q. So, for incendiary fire, you're
11 looking for accelerants?

12 A. No. Well, you can start a fire
13 with an open flame, if you want. You don't
14 have to use accelerants.

15 Q. But do you look for accelerants
16 when you're ruling out an incendiary fire?

17 A. Sometimes, but there weren't
18 any patterns in support on the floor.
19 There were no patterns on the floor to
20 support an accelerant was utilized. The
21 only damage to the carpet was the carpet in
22 front of the closet which was consistent
23 with thermal attack and melting from the
24 fire that progressed from the closet and
25 outward.

1 J. KARASINSKI

2 Q. So we talked about the bed that
3 was unmade on Mr. Hollowell's side, we
4 talked about the witness mark where he was
5 found, we talked about toaster oven that
6 may or may not have been on, we talked
7 about the coffee pot that may or may not
8 have been scheduled, we talked cordless
9 phone.

10 A. Well, the coffee pot though
11 too, we also talked about and I do this at
12 my house, if I don't drink it, I leave it
13 there and I don't pour it out.

14 Q. Could have been from that
15 morning just as easily, absolutely. I'm
16 not -- I'm just summarizing. I'm not
17 trying to --

18 A. Okay.

19 Q. But we talked about some of
20 these things, and my question to you, sir,
21 is, hearing me summarize them now, are they
22 -- are these facts consistent with everyone
23 in the house being asleep at the time of
24 the fire?

25 A. To me, they are, yeah.

1 J. KARASINSKI

2 Q. Does any of this make you
3 suspicion in any way at all?

4 A. No, it does not.

5 Q. Did you consider the
6 possibility of an intentionally set fire in
7 this case?

8 A. Yes, I did.

9 Q. What did you do to forensically
10 rule that out?

11 A. I eliminated that based on the
12 witness statements, fire patterns and fire
13 dynamics.

14 Q. So you looked at
15 Ms. Marcellin's statements together with
16 the physical evidence that we have
17 discussed?

18 A. Correct and that brought me to
19 my final hypothesis and then I relied on
20 Mr. Martin for the inspection, and then I
21 relied on Andy lifting her to eliminate the
22 electrical system of the house, if
23 possible.

24 Q. You've worked on some arson
25 cases, right?

1 J. KARASINSKI

2 A. I have, I have put people in
3 jail.

4 Q. Is it your experience that
5 female arson offenders typically burn an
6 area of personal significance?

7 A. Sometimes, they do. I had a
8 lady a couple of years ago that she lit her
9 husband's clothes on fire.

10 Q. Would you view the fire as is
11 in this case is that the fact that it was
12 an area of personal significance, does that
13 mean anything to you in ruling out
14 potentially set fire?

15 A. In the closet was a personal
16 interest, towels, sheets?

17 Q. Perhaps it was the notebook or
18 the desk area?

19 A. Based on my investigation and
20 the statements provided by the sole
21 occupants that's still alive, I was able to
22 eliminate incendiary fire based on witness
23 statements, fire patterns and fire
24 dynamics.

25 Q. So we have talked about how you

1 J. KARASINSKI
2 came to your conclusions in this case and
3 you basically have explained to me that you
4 looked at your possible hypotheses, you
5 looked at the physical evidence and witness
6 statements that was supportive -- or not
7 supportive each hypotheses and you relied
8 on a single hypothesis that you could not
9 rule out, is that a fair summary of our
10 conversation?

11 A. That sums it up pretty well.

12 Q. So you're the NFPA expert, so
13 you can explain this to me, because it
14 seems like it's a very fine point that the
15 NFPA has been debating for sometime, what's
16 the differences process that you used here
17 and negative corpus?

18 A. I'm not sure what you mean.

19 Q. So 1965, it discusses negative
20 corpus and it says that process of
21 elimination can be used inappropriately.
22 Identifying the ignition source for a fire
23 by believing to have eliminated all
24 ignition sources found known or suspected
25 to have been present in the area of origin

1 J. KARASINSKI

2 and for which no supporting evidence exists
3 is referred to by some investigators as
4 negative corpus.

5 And there's some further
6 discussion, goes on to say that negative
7 corpus is not consistent with a scientific
8 method. It is inappropriate, it should not
9 be used because it generates untestable
10 hypothesis and may result in incorrect
11 determinations of ignition sources and
12 first or a secondary fuel area ignited.
13 Any hypothesis formulated for causal
14 factors, fuel ignition source ignition
15 sequence must be based on the analysis of
16 facts and logical inferences that flow from
17 those facts.

18 So this is a discussion that
19 they have of negative corpus and the
20 process of elimination, and I'm asking how
21 you distinguish the scientific process you
22 did here from what's described in 1965?

23 A. Well, I didn't use negative
24 corpus. I used the process of elimination
25 and the lack of ignition sources or

1 J. KARASINSKI
2 competent ignition sources in the room of
3 origin as well as the closet, and through
4 that, I was able to find a potential
5 ignition source. The remains of the jelly
6 roll that were in the closet. And so, that
7 is not process, that is not negative
8 corpus.

9 Negative corpus is when you're
10 trying to say that this is how the fire
11 started and you evidence to support that.
12 I do have evidence, I do have physical
13 evidence to support what the ignition
14 source was.

15 Q. I appreciate that
16 clarification?

17 A. It is a very big topic.

18 Q. It's been revised quite a few
19 times, so I didn't really get it, so thank
20 you for that.

21 I'm going to turn your rebuttal
22 report now, I'm going to try to get through
23 it as quickly as I can. I have one last
24 question on your initial report though.
25 You said that there's no exposure damage to

1 J. KARASINSKI

2 other residences in the area, what did you
3 mean by that?

4 A. So a lot of times, this is for
5 more for the insurance related fold, right.
6 So sometimes they're going to want to know
7 -- like let's say you have a house -- you
8 have a house that's on fire and
9 Jacqueline's house is right next door, did
10 that fire cause any damage to that
11 neighboring property because the insurance
12 company is going to want to know if they
13 have to open some sort of liability file,
14 if they're at fault for the neighboring
15 damage, so we include that in there, but
16 that's more for the insurance industry.
17 That's what that's there for.

18 Q. I'm going to turn to your
19 rebuttal report and it's my hope we can go
20 through it quickly and get you on your way.
21 So thank you for bearing with me, I don't
22 know if you want to take a short break or
23 if you want to just try and knock it out,
24 it's up to you.

25 A. Knock it out, if you think you

1 J. KARASINSKI

2 can get through it quickly.

3 Q. On the first page, this is our
4 rebuttal report we marked as Exhibit 2,
5 right?

6 A. Yeah, can you just make it
7 bigger or --

8 Q. Yes.

9 A. I have mine here, I can --

10 Q. So this first section that I
11 have here, this paragraph says that the
12 statement is being provided to address data
13 points raised in the reports of defendant,
14 Hp.

15 My question, Mr. Karasinski, is
16 there anything upon which you relied in
17 this rebuttal report that you didn't have
18 at the time of your original report other
19 than Hp's expert disclosures?

20 A. No, it was due to the expert
21 disclosures provided by Exponent and they
22 addressed things that we were all competent
23 as experts that we have eliminated on the
24 site. So they weren't on the scene,
25 Exponent, so they didn't have the

1 J. KARASINSKI

2 opportunities to be privy of those
3 conversations and to get those experts
4 agreements, so I felt that they needed this
5 additional information for them to
6 determine that that still supports their
7 hypothesis that they concluded.

8 Q. You'll see there's a note on
9 this first page and every subsequent page
10 here that begins with a manufacturer, do
11 you see that?

12 A. Yes.

13 Q. So there's some caveats here in
14 this section, including that this is a
15 preliminary draft of laboratory analysis
16 notes, and it should not be considered a
17 formal report, do you see that?

18 A. Yes, that's a format issue with
19 this form we use for rebuttal reports.
20 That's on every one of our rebuttals.

21 Q. This is the only rebuttal?

22 A. The only draft out there.

23 Q. Okay, great. Now, you relied
24 on a supplemental declaration from Ms.
25 Marcillin, my question is, was this

1 J. KARASINSKI

2 information you could have had at the time
3 of your initial report?

4 A. It could have been but I wasn't
5 -- again, everyone agreed on the area of
6 origin and nobody brought up that Carol was
7 going to be standing in the heat later that
8 was only four feet high. That would have
9 been of temperatures close to
10 1,000 degrees, so when I saw that that's
11 what their, kind of, opine, then I felt
12 like I needed her driver's license, because
13 I didn't know how tall she was. So I
14 wanted to show that if she were standing in
15 that room when they they think the -- as
16 far as Exponent believes she was in that
17 room where she would be standing in that
18 heat layer which would be impossible and
19 you would die.

20 Q. I'm turning to page 4 of report
21 and you stated that Ms. Marcellin traveled
22 past the couch more than once. Do you see
23 that?

24 A. Yeah, and that was again
25 because they -- Exponent opined or offered

1 J. KARASINSKI

2 that the living room could be the origin
3 and the point of origin could be the couch.
4 And again, they weren't there to hear the
5 fire department's statements about what
6 occurred and what statement that she gave
7 them, so I felt it necessary for your
8 experts to know that she passed this couch,
9 and it wasn't on fire, at least four times.

10 Q. So the one thing I can -- I
11 have seen this statement and we have looked
12 at the depositions together, she certainly
13 doesn't say the couch was on fire, right?

14 A. Correct. She doesn't say it
15 was or it wasn't but she had to walk by it
16 and if you're walking by a couch on fire,
17 that's probably what you're going to try to
18 put out and not even go to the office.

19 Q. I understand exactly what
20 you're saying. What I was going to ask,
21 which is, she doesn't actually say one way
22 or another whether the couch was or was not
23 on fire, right?

24 A. If that couch was on fire, that
25 occurred well after full room involvement

1 J. KARASINSKI

2 of the closet and if she was standing in
3 there and that couch was on fire with the
4 amount of damage on that couch, she
5 wouldn't be alive.

6 Q. In respect to the furnace, is
7 there any possibility that the furnace
8 overheated or had broken down insulation in
9 it?

10 A. No, there were no fire patterns
11 on the sides or above or the wall or where
12 the pipes went through the roof of the
13 ventilation.

14 Q. Did you take the wall that
15 abutted the furnace and the closet that was
16 issue in this case, did you take that wall
17 out or did you remove the furnace to see if
18 there was any damage to that abutting wall?

19 A. No, you could see the studs
20 from closet and the studs that were between
21 the furnace and the studs that you can
22 visually see on the wall that adjoins the
23 closet and the furnace, that mechanical
24 room, those studs don't have any fire
25 damage to them.

1 J. KARASINSKI

2 So using that analogy, if I had
3 a fire that originates at the furnace would
4 that ignite burn -- be burning inside the
5 wall studs in that wall and I do not have
6 that. That also supports eliminating that
7 based on fire patterns that it did not
8 overheat and it did not have any sort of
9 failure with its high limit switch or
10 terminal couple whatever was going on.

11 Q. Now, in her Supplemental
12 Declaration, Ms. Marcellin states that she
13 looked in on the furnace and saw that it
14 wasn't on fire, right?

15 A. Correct.

16 Q. Isn't that different from her
17 testimony in her deposition where she said
18 he thought the smoke might be from the
19 furnace but then she saw the glow from the
20 office and that's where she went first?

21 A. I don't -- you have to pull it
22 and put it in front of us, I don't recall
23 the statement being --

24 Q. Yeah, you cite in your report
25 at 21, you have part of her testimony here,

1 J. KARASINSKI

2 I think it's on this page.

3 A. Well, I think -- I don't know
4 if she was exactly asked that question.
5 And we did that original information from
6 the fire department when they were doing
7 their normal this is what happened, this is
8 what she said, so everybody got that
9 information at the initial -- at our
10 initial scene exam.

11 So I don't know. Maybe she
12 didn't, maybe she wasn't asked, well, did
13 you open the louver door? I mean, maybe
14 she wasn't asked that, but...

15 Q. If you take a look at this
16 testimony that I put up on the screen here
17 which you cite in your report at pages 20
18 and 21.

19 A. Okay.

20 Q. You can see line -- beginning
21 on line six, Ms. Marcellin stated I could
22 smell smoke. I knew there was something
23 going on, hoping it was just the furnace,
24 maybe it had smoke. I knew there was
25 something going on, hoping it was just the

1 J. KARASINSKI

2 furnace. Maybe it had malfunctioned and
3 was putting out smoke or something and I
4 could shut that down, but I went back
5 through the kitchen, passed the bathroom
6 through the kitchen and I got to the living
7 room. When I stepped right to go down that
8 hall, meaning, the hall with the furnace,
9 right?

10 A. So she would have stepped left
11 and not right, but, okay.

12 Q. The hall to the furnace was to
13 the left and the hall to the office was to
14 the right?

15 A. No, you said she stepped to the
16 right to go down the hall, but the hallway,
17 you'd have to make a left to go down the
18 hallway, not a right, a right --

19 Q. She was mistaken when she said
20 she stepped right to go down the hall?

21 A. Yeah.

22 Q. Okay.

23 A. Yeah, when you're in the kitchen
24 and you are looking at this photo you had
25 up on the refrigerator, she would have to

1 J. KARASINSKI

2 walk that way and go left to go down the
3 hallway and not to the right.

4 Q. So reading the testimony that I
5 just read to you, I read that to say that
6 she woke up, she smelled the smoke, she was
7 hoping it was the furnace, and then
8 immediately when she went down the hall,
9 she could see the glow of the fire coming
10 from the room with a laptop, do you read
11 this to say anything different?

12 A. No, that's what it says.

13 Q. Okay.

14 A. But again, it doesn't say it
15 was the second time, because the first time
16 that she went to the room, remember, she
17 said she couldn't see flames. The only way
18 that she is going to see flames or a glow
19 is because that closet is probably fully
20 evolved at that point. She is not going to
21 see a glow like that from the batteries
22 accelerant.

23 So I believe that to be the
24 second time that she was going to go back
25 to try to extinguish it and that's when she

1 J. KARASINSKI

2 sees that glow and that's when you have
3 full room involvement of the closet.

4 Q. So when she says, when I
5 stepped right to go down that hall, I could
6 see the glow of the fire coming from that
7 room with the laptop was and I immediately
8 backtracked, grabbed the fire extinguisher,
9 but when I got there, I was already putting
10 out firewalls. You're saying she is
11 mistaken here?

12 A. I'm not saying she was
13 mistaken. I'm saying that glow, I think,
14 is what she sees when that closet is full
15 room involvement, that space. Otherwise,
16 there's not going to be a glow. I mean,
17 you might see flashes from the cells going
18 off, but that glow is a fire event.

19 Q. So that fire would have been
20 fully involved by the time she made it to
21 that doorway?

22 A. Yeah, and if you remember from
23 her testimony, she went to the room first
24 and then she went back to the kitchen to
25 get the fire extinguisher and when she went

1 J. KARASINSKI

2 back for the extinguisher, it was too big
3 to put out and that's when she was -- let's
4 go to Charles. Let's vacant the property.

5 Q. Right, but when she went and
6 saw the glow the first time, it's your
7 testimony that the closet would have been
8 fully evolved at that point in order for
9 her to see the glow at all?

10 A. For her to see the glow like
11 that, the closet that would have to be on
12 fire at that point.

13 Q. So in her declaration, I'm
14 going to put that up for you. This is the
15 declaration we have been talking about,
16 right, you're seeing this?

17 A. I have seen it, yes. Can you
18 make it bigger, if you're going to...

19 Q. Yeah, absolutely. So I'm
20 hoping we can resolve an issue I'm having
21 with this. There is some testimony here
22 that appears to be confusing, and in the
23 declaration in the section that I put up
24 here, it appears that Ms. Marcellin is
25 stating that she could not -- so she could

1 J. KARASINSKI

2 see into the office closet, but that she
3 didn't enter the office. And so, my
4 question is, what we're just talking about,
5 isn't it true that you can't see the closet
6 from the hallway?

7 A. You can't see the interior of
8 the closet unless you walk in that two or
9 three feet to get past that closet wall,
10 that will be on her left side.

11 Q. You see, I'm confused because
12 she says --

13 A. Well, it's going be dark out
14 and the light switches are in the
15 opposition, so the see glow she is seeing
16 is fire.

17 Q. So in her statement here, she
18 says she didn't detect any smoke or heat
19 coming from the closet while she was in the
20 doorway, right, do you see that?

21 A. Are you referring to is this --
22 the first or second paragraph?

23 Q. Paragraph 4 she says she did
24 not enter the room, and then she says in
25 Paragraph 5: I did not enter the room at

1 J. KARASINSKI

2 that point because of flying projectiles,
3 do you see that?

4 A. Yes.

5 Q. And in paragraph 6, she says I
6 again observe that there was no smoke,
7 flames or heat coming from the closet. So
8 how could she be unable to enter the
9 office, but still be able to examine the
10 contents of the closet?

11 A. I don't know that that's what
12 she is saying. Are you reading from
13 paragraph 5 or 6?

14 Q. The last sentence that I read
15 was from paragraph 6. I again observe
16 there was no smoke, flames or heat coming,
17 paragraph 5, she says, I did not enter the
18 room.

19 A. I think the point here that
20 needs to be made is we don't know whether
21 this was the first or second time she went
22 there. So at the first time, when she's
23 seen these flying projectiles, that's when
24 we're having an issue with the laptop and
25 the battery pack, and that is still

1 J. KARASINSKI

2 occurring when she thinks she can put it
3 out and goes to get the fire extinguisher,
4 but when she comes back, the closet
5 contents are now on fire. That's the glow
6 that she is seeing, because again, the
7 hallway light was in the on off position.
8 And so, this time of year, it in the middle
9 of winter in upstate New York, it's dark.
10 So that room is going to be dark. So the
11 only way she could see is if on the second
12 time, you see that glow is if that -- if
13 the closet is on fire when she's returning
14 with the fire extinguisher.

15 Q. But she did testify she saw the
16 glow when she first went there, right?

17 A. I'm not sure anyone asked
18 whether she saw the glow the first time or
19 the second time.

20 Q. Well, isn't that what we just
21 went over, it's in your report at page 21?
22 She says, "I went to the kitchen. When I
23 stepped to go down the hall, I could see
24 the glows." This is when she first
25 approached the office, no?

1 J. KARASINSKI

2 A. Yeah, I mean that's what it
3 says, but if it -- was that with the with
4 full room involvement of the closet, she
5 wouldn't be able to -- she wouldn't be able
6 to get into that room at all.

7 Q. That's the what she says in her
8 declaration, right, I didn't enter the
9 room?

10 A. Yeah, because this is why I
11 think she's just confused, because we are
12 really not talking about -- she is
13 physically not being asked is this the
14 first time or second time you went.

15 So what I believe happened and
16 makes sense is that when she goes the first
17 time and smells smoke and we have got the
18 smoke alarm activation, she goes -- that is
19 when she sees the flying projectiles
20 flying, and then she exits to go get the
21 fire extinguisher she comes back, that's --
22 on her way back, that's when the closet
23 material is ignited and that's the glow
24 that she sees.

25 Q. So she was mistaken the first

1 J. KARASINSKI

2 time and she just corrected herself here?

3 A. I don't know that she corrected
4 herself. I just don't think she was the
5 asked the question, was this the first or
6 second time, I think maybe she's just
7 confused.

8 Q. Well, let's just be clear. She
9 says -- you described this here as
10 Ms. Marcellin explained her route of travel
11 after taken -- after being awoken from the
12 smoke on the morning of fire and described
13 what she saw. That that's how you
14 captioned this, right?

15 A. Yes.

16 Q. The question was, can you take
17 me through the route you took upon waking
18 on January 24th, 2020, using this diagram,
19 that was the question, right?

20 A. Okay.

21 Q. That's the question?

22 A. Yes.

23 Q. So and her answer was, "I
24 opened the door, I silenced the fire alarm,
25 I could smell smoke, I went back through

1 J. KARASINSKI

2 the kitchen, passed the bathroom, through
3 the kitchen into the living room, I saw the
4 glow. So this is her first time, right?

5 A. But again, that glow because
6 it's dark, I guess, it could still be the
7 batteries expelling or you're going to have
8 a small fire where you can see that, right,
9 you've got burnt plastic and material on
10 the laptop. That could be a small fire on
11 the laptop where she sees the glow.

12 What I'm saying is when she
13 goes back, if that -- if the closet is at
14 full room involvement, there is no way she
15 can get into that room. That's all I'm
16 trying to opine based on this question.

17 Q. That's helpful, because I'm
18 trying to figure out. She's saying in this
19 Supplemental Declaration, "I could see into
20 the closet," she said, "I didn't see smoke,
21 I didn't see heat," she says, "I observed
22 no heat. No flames coming from the
23 closet," when she comes back with a fire
24 extinguisher, so this is the full
25 involvement time, right, she comes back,

1 J. KARASINSKI

2 it's full involvement, right?

3 A. Again, I just I think -- I
4 don't think she was asked the question
5 appropriately. I think this is the second
6 time she goes back because she would not be
7 able to get down that hallway if the --
8 within two minutes after this full room
9 involvement, there's no way she would be
10 able to walk down that hallway and get
11 access into that room.

12 Q. So, Mr. Karasinski, just to be
13 clear, what I have up here on the screen
14 now is not her testimony where she was
15 asked questions by Jackie. This is her
16 Supplemental Declaration that she prepared
17 based on informations you requested from
18 Attorney Schwarz, do you see that?

19 A. Right, again, I'm saying
20 there's nowhere in this question does Mr.
21 Schwartz say is this the first or second
22 time? So again, I'm telling you -- if all
23 I'm saying is there's no way if she went
24 down that hallway and that closet was fully
25 involved like it is based on the fire

1 J. KARASINSKI

2 damage that we see, she would not haven
3 been able to enter that bedroom or the
4 office, I'm sorry, the office.

5 Q. He she certainly wouldn't have
6 been able to see into the closet, right?

7 A. No, she cannot see in the
8 closet. So I believe what she is saying is
9 went she went the first time, she could get
10 in there, because that's the initiation and
11 the incipient stage of that failure at the
12 laptop, the battery pack. She could walk
13 if there at that point and at that point,
14 that's right when the event occurs. So
15 that produces smoke, you've got the melting
16 plastic, you got the flaming combustion
17 from the cells, and there are expelling
18 when she's in there, she had to be get in
19 there somewhat, because how are you going
20 to see them, you know, blowing up out of
21 the computer if she didn't walk in.

22 So I think that was the first
23 time. I think when she came back the
24 second time, that's when she could see the
25 glow and realized she couldn't put it out

1 J. KARASINSKI

2 with a fire extinguisher and exited the
3 property and tried to get Charles out.

4 Q. When you were telling me that
5 she wasn't asked the right questions in
6 respect of this Supplemental Declaration,
7 those are the questions you gave to
8 Attorney Schwarz, right?

9 A. Yes, but I don't know how
10 Mr. Schwartz gave her these questions. I
11 don't know, did he -- I don't know if he
12 called her. I have no idea.

13 I gave him the questions,
14 because that's what was told to us by the
15 fire department during our initial
16 inspection, but again, the folks at
17 Exponent, they weren't privy of all that
18 information, right, so I felt in necessary
19 to do this rebuttal, so they can have the
20 same data that we have.

21 Q. Could Ms. Marcellin's
22 Supplemental Declaration have been a little
23 clearer too?

24 A. What to -- what do you mean
25 "clear"? Clear or what?

1 J. KARASINSKI

2 Q. We are just talking about how
3 he could have added more detail on when was
4 the first time, when the with second time
5 and what exactly she observed on each of
6 those times. And that above made this
7 conversation go a little bit quicker,
8 right?

9 A. Yeah, I don't think you would
10 have had to many questions about it.

11 Q. So it could have been a little
12 clearer. Like her affidavit, this last one
13 that we are looking at?

14 A. It could have been a little
15 clearer, but again, the physical evidence
16 and based on my training education and
17 experience, I know that that's not
18 accurate, because she wouldn't be able to
19 walk down that hallway if that closet had
20 full room involvement.

21 Q. Would you agree that if there
22 was a faster response to this fire, that
23 Mr. Hollowell's chances of surviving might
24 have increased?

25 A. Do you have a timeline from

1 J. KARASINSKI

2 when the 911 call was to when fire
3 department arrived on site?

4 Q. It was 18 minutes.

5 A. 18 minutes. Yeah, that's
6 definitely a slow response time, but it's a
7 volunteer fire department, and this is
8 really a remote area.

9 Q. Certainly, certainly. So a
10 faster response time probably would have
11 been somewhat increased his chances?

12 A. Any faster response anything,
13 shooting fire, anything, car accident,
14 anything can improve anybody's chances.

15 Q. So, this is your opportunity to
16 explain to me what I was so confused about
17 with an actual picture, okay?

18 A. Okay.

19 Q. Here is Figure 7 of your
20 rebuttal of which is the location of the HP
21 Pavilion laptop and has various arrows and
22 indicators on it, do you see that?

23 A. Yes.

24 Q. So you stated that the HP
25 monitor has less thermal damage in the

1 J. KARASINSKI

2 laptop in front?

3 A. Correct.

4 Q. Isn't the HP monitor vertically
5 oriented?

6 A. Yeah, so is the laptop.

7 Q. The laptop is vertically
8 oriented, the screen, the keyboard assembly
9 is horizontal, wouldn't you say?

10 A. The keyboard is horizontal, but
11 the screen is vertical.

12 Q. Is the screen 90 degrees like
13 the monitor or is it at some more --

14 A. Well, I don't know -- first of
15 all, it's at an angle now, but, I mean, for
16 all we know, when NEFCO investigator put
17 that piece of tape on it, he could've
18 pushed it open a little bit further, I
19 don't know the exact division of the
20 monitor or screen for the Hp laptop.

21 Q. You see the papers that are
22 vertically oriented, right?

23 A. Yes.

24 Q. Those weren't burned either,
25 right?

1 J. KARASINSKI

2 A. They're starting to turn, you
3 can see the discoloration and if you zoom
4 in a little bit, you can see all the
5 Post-It notes on the side wall of the
6 armoire and those are almost to ignition
7 right there, those post it notes
8 underneath, yeah, right there, yes, yes.

9 Q. So we see some evidence that
10 things are getting close to ignition, but
11 they weren't burned, right?

12 A. No, they were burnt. You can
13 see, there is burning on the top where the
14 red box is, the stuff that's higher is up,
15 that's burning. You've got --

16 Q. I'm thinking more of as I'm
17 looking at paper and I'm expecting it to be
18 consumed. So when say burned, I mean --

19 A. No. So remember, you've got
20 them all stacked together, right, so I'm
21 assuming you and Jacqueline have had a
22 bonfire at some point in your life and you
23 wanted to get rid of your magazines and you
24 put a stack of your magazines in the bond
25 fire and even after all the wood and you

1 J. KARASINSKI

2 are pushing those magazines and you still
3 have unburned pages that you could
4 physically open up and read.

5 So these are protected areas.
6 So the areas that aren't protected, right,
7 you can see that you had charring and you
8 have flaming ignition starting, especially
9 up in the red box.

10 But if you go back to my
11 explanation about my paper again, again,
12 with no ceiling fan, no ventilation issues,
13 no airflow, if I light the bottom of that
14 piece of paper, right, with the that, you
15 have plenty of heat and fuel to consume
16 entire piece of paper.

17 But now, if I ignite -- if I
18 attempt to ignite the top of that piece of
19 paper, it's going to ignite, and then it's
20 going to burn itself out, because its fuel
21 configuration is not vertical.

22 Q. So why didn't these -- I guess
23 I'm just restricting ourselves to the
24 obvious cases of these papers that are
25 protruding out in the red boxes. Why

1 J. KARASINSKI

2 didn't they get burned up?

3 A. Because they were -- again, we
4 talked about fuel configuration. All these
5 are sitting there horizontal, so your top
6 left box is wide, but you can see that
7 they're starting to burn, but again, you
8 can see -- look at the differences between
9 the Post-It notes on the sidewall and the
10 items that are laying horizontally flat on
11 top of each other.

12 Two different patterns, because
13 one vertical and one's horizontal
14 protecting the other pieces of paper, just
15 like I described with the magazine in your
16 bond fire out back in your backyard at
17 home.

18 Q. What impacts the amount of
19 radiative heat an object receives?

20 A. It's fuel configurations. If
21 it's and there's things stacked on top of
22 it, so again, it goes back to, you can see
23 there's a clear difference between how much
24 charring and that those Post-It notes
25 almost got to ignition compared to the

1 J. KARASINSKI

2 items that are stacked on top of each other
3 and protected on the shelves. And then if
4 you take the stuff in the big square at the
5 top, and then you go down and you look at
6 the middle square and the bottom, you can
7 see where the paper is exposed, it is
8 starting to burn.

9 Q. I wanted to go back to
10 Figure 43 of your report which relates
11 to --

12 A. 43?

13 Q. Figure 43.

14 A. Yes.

15 Q. So we have talked about how the
16 top gas layer, it doesn't need to descend
17 to the level of the item it's damaging
18 basically in order to damage it. So you
19 said that in order to --

20 A. Well, it depends on the
21 material and the radiant heat and her
22 coming down from the heat layer, yes.

23 Q. Right. So my question is, in
24 this picture, you've drawn demarkation line
25 along the wall, right, in 43 here?

1 J. KARASINSKI

2 A. Correct, to show the flow and
3 the heat layer, yes.

4 Q. So, what caused the extensive
5 heat damage to this couch in this photo?

6 A. As the radiant heat was banking
7 down, you can see the uniform burning on
8 the couch, at the radiant heat was banking
9 down from the heat layer, it ignited the
10 material on the couch, because that's at a
11 lower ignition temperature than wood
12 panelling or the carpet or as you just
13 talked about, why that chair doesn't have
14 as much damage to the couch, because the
15 chair is a different material.

16 So that uniformity on the
17 couch, if you want, if you have a 921
18 there, I think it's Section 6.5.7, you can
19 see what the couch looks like when it's
20 burning. You've got the melting material
21 dripping down on the ground, if that is
22 your origin location, if this is my origin,
23 then the -- whatever area that the fire may
24 have originated on this house would be
25 completely burned down to the floor level

1 J. KARASINSKI

2 based on the damage we have on this house.

3 This damage on this house is
4 totally uniform, and that's because that's
5 the radiant heat that ignited the couch
6 from the heat layer in the living room as
7 the fire progressed.

8 Q. I think we talked a little
9 about it -- a little bit about thermal
10 runaway and I understand that Dr. Martin is
11 going to be the expert on the battery
12 chemistry and things of that nature, but I
13 want to ask you fire investigation, if
14 that's okay. So what factors from a fire
15 investigation standpoint would increase the
16 likelihood of thermal runaway in a 18650
17 cell?

18 A. That is going to be a Steve
19 question. I don't have any opinions on the
20 laptop.

21 Q. When you did your -- the
22 recycling fires, do they get a lot of
23 batteries that are beat up in one way or
24 another, I mean you talked about physical
25 abuse, it gets dropped and such, but do you

1 J. KARASINSKI

2 get, you know, other kinds of abuse, you
3 know, people it was too cold, it was too
4 hot, they ran over it with their car?

5 A. Oh, of course, yeah, there's
6 all sort of reasons why lithium ion
7 batteries fail, and they're also going to
8 be a mechanical defects or a design defect.
9 But again, those are questions for Steve, I
10 mean, yeah.

11 Q. Okay. How hot does radiative
12 heat get in a compartment fire before flash
13 over?

14 A. Well, flash over, everything at
15 night at the same time, so you're at the
16 same temperature from ceiling to floor
17 level, so from anywhere from -- I guess I
18 could give you a range, 18 to 2100 degree
19 F.

20 Q. That can certainly cause
21 thermal runaway, right?

22 A. I said that earlier when I when
23 you were talking about the batteries, that
24 thermal hear and fire attack is also a
25 cause for thermal runaway within the

1 J. KARASINSKI

2 battery cells.

3 Q. So now, I want to talk about --
4 give you an opportunity to see something
5 that we have been just talking about this
6 whole time which is the slug, what I have
7 been calling the slug, but the jelly roll
8 projectile which I believe is shown on?

9 A. Next slide.

10 Q. Figure 18?

11 A. Correct.

12 Q. You see that?

13 A. Yes.

14 Q. So I guess, I'm going to start
15 with a couple of things. The first is the
16 slug that we are talking about that you
17 believe ignited the secondary fuels in the
18 closet is depicted in the red circle drawn
19 on Figure 18?

20 A. Yes.

21 Q. Was this item vouchered by FRT?

22 A. What do you mean "vouchered"?

23 Q. Was it collected for further
24 examination?

25 A. Yes.

1 J. KARASINSKI

2 Q. What was the nature of further
3 examination you undertook?

4 A. That again would be for Mr.
5 Martin at the lab exam, but obviously, we
6 took this as evidence because it was a
7 potential ignition source that we had to
8 evaluate.

9 Q. Did you X-ray it?

10 A. I'm not sure -- an X-ray is not
11 going to give you any information. That's
12 basically just going to show you the
13 outline of that subject, so you if X-ray
14 1650s, it's just going to shoot right
15 through it.

16 So if you were going to do
17 anything with this jelly roll, i don't know
18 that it would give you any evidence or
19 value. The only thing you could do to
20 that, but because it's been a through a
21 fire and it's been ignited, I don't know
22 that you would be able to determine if
23 there was any mechanical damage or anything
24 to it, but the only way that you be able to
25 do that would not be an X-ray. You'd have

1 J. KARASINSKI

2 to CT it, but based on the amount of damage
3 to it, I don't feel a CT would tell you
4 anything different at that point, just
5 because of the amount of damage it has
6 already sustained.

7 Q. So this -- if you are to do any
8 further analysis, you would Ct it, you
9 didn't in this case because of damage it
10 depicted in Figure 18?

11 A. Yeah, you would have to ask Mr.
12 Martin if he would want it CT, that's with
13 him.

14 Q. Have you seen and touched the
15 item that is depicted in the red circle and
16 Figure 18 yourself?

17 A. Have I seen it? I had to
18 collect it. I don't know I was actually
19 the one that put it in the bag, but, yeah,
20 I have seen it, yes.

21 Q. Have you ever touched it?

22 A. I don't know if I touched it,
23 but the people that the lab we handed, your
24 experts as well as Andy and the battery
25 expert. Again, this goes back to the

1 J. KARASINSKI

2 batteries with the laptop, so it was not --

3 Q. Yeah, I understand that this is
4 -- that maybe some of technical aspects of
5 the battery analysis are better directed to
6 others, but I guess, my question is, this
7 image of this -- that's on Figure 1 here
8 is the first time that you've seen the
9 picture of this and you are telling me that
10 this is the material that was competent to
11 ignite the secondary sources in the closet,
12 right?

13 A. Correct, but Greg was there and
14 Greg saw this as well. Greg was there for
15 the whole time, so he should have pictures
16 of it. I believe I have asked for Greg's
17 pictures. I don't think we have received
18 any of Greg's pictures yet.

19 Q. When you identified the
20 ignition material that in your opinion was
21 competent of causing a secondary fuel to
22 ignite resulting in the fire that is the
23 subject of this litigation that caused the
24 death, did you think it appropriate to do
25 anymore analysis on this piece? I mean,

1 J. KARASINSKI

2 the other pieces in the room were all
3 individually had, right?

4 A. Yes, but so how we process the
5 scene, if you go back to, like, one of
6 original photos, you don't have to, but
7 you'll see where all the tents were out.

8 So instead of having people
9 walking into that room of origin and
10 stepping on potential evidence and things
11 of that nature, we let people get their
12 pictures. We had, I believe, Andy was
13 standing in there to make sure that nobody
14 stepped on anything, and then as soon as
15 everyone got their overall pictures of that
16 room, we said, okay, we're going to stop,
17 we're going to tent the evidence that we
18 can see and bag that now, so it doesn't get
19 trampled on or damaged during our
20 inspection. So we bagged that separately
21 before we started to excavate and process
22 the closet.

23 Q. I guess, what I'm getting at,
24 Mr. Karasinski, is, would you agree with me
25 that what we're looking at in Figure 18

1 J. KARASINSKI

2 what's circle there and then the close up
3 is critical evidence in a case?

4 A. Well, it's part of admission
5 scenario, so any bit of the data is
6 important to your case. It's not one over
7 another, you have to look at it at its
8 totality. But again, Greg Gorbit was
9 there. He observed the photographs as
10 well, and we didn't hide it from anybody,
11 everybody saw it, so if anybody should --

12 Q. So to be clear, I'm not
13 suggesting you you did anything, Mr.
14 Karasinski, I wouldn't suggest otherwise.
15 And just focusing on this piece of evidence
16 because -- let me phrase it in a negative.
17 If you had never found what's depicted here
18 in Figure 18 and you had never seen it and
19 you had never collected it, and you have
20 never examined it, would that change any of
21 your opinions in this case?

22 A. Because the melting temperature
23 of the battery material is higher than what
24 temperature is of the closet is going to
25 get to, I would expect if I'm going to be

1 J. KARASINSKI

2 able to opine that I have gotten cell
3 material or shrapnel material that vented
4 from a cell and I find that in there, I
5 should find that in there, that's my
6 admission source, because the melting
7 temperature of that is higher than the
8 temperature of the closet fire is going to
9 get to, heat-wise and energy-wise. So if I
10 did not find it in the closet, I would not
11 have opined that the battery failure
12 ignited cause material.

13 Q. That answers my question. So
14 we looked at the other cell adjuster not
15 the stuff that landed in the closet. I
16 think it was your testimony that basically,
17 they didn't have enough energy to ignite a
18 nearby combustible in the open flame, there
19 was damage was on charring and other
20 thermal damages, is that fair to say?

21 A. Can you repeat the question,
22 I'm sorry?

23 Q. No, I apologize. We are almost
24 done and it's a long day. I said when we
25 looked at the other battery cell materials

1 J. KARASINSKI

2 that you covered outside the closet, in the
3 office room, would you agree that in the
4 those locations where you found those
5 materials, the battery cell material didn't
6 have enough energy to ignite the nearby
7 combustibles into open flame?

8 A. I would agree with that
9 statement, yes, but we did have charring
10 like we looked at on the carpet, where I
11 believe there was some charring in the
12 garbage can or adjacent to the garbage can
13 which was on the other side of the room.

14 Q. That's consistent of what you
15 said earlier about they were probably still
16 venting when they landed?

17 A. Correct.

18 Q. The material that's shown here
19 in Figure 18, is that the material that's
20 consistent with the copper foil?

21 A. Yes.

22 Q. What makes you say that?

23 A. Just when I observed it, we all
24 knew what it was, we all knew that it was
25 foil from battery remains.

1 J. KARASINSKI

2 Q. Did you measure the mass,
3 surface area or thickness of this piece of
4 foil?

5 A. You would have to go to Mr.
6 Martin on that or your battery expert who
7 was at the lab exam.

8 Q. If you had to estimate the
9 sides, would you say it's like two inches,
10 that's what it looks like to me, but
11 without any --

12 A. I would have to --

13 Q. -- that's maybe an inch or an
14 inch and a half?

15 A. Yeah, I would have to put a
16 scale next to it, I don't know how large it
17 was or how thick the material was. But
18 again, the battery expert was able to
19 observe this and ask for any testing he
20 wanted to do to at the lab exam already,
21 so...

22 Q. How thick is copper foil in a
23 battery?

24 A. That's a Mr. Martin question.

25 Q. They are thin though, right?

1 J. KARASINSKI

2 A. Oh, it very thin. Yes, like,
3 paper-thin, yeah.

4 Q. Would you agree that a piece of
5 copper foil of this size would cool when
6 it's ejected from the battery?

7 A. Again, that's a Mr. Martin
8 question, but I can answer that, yes. That
9 is going to cool as it ejects based on its
10 mass size and the amount of energy that's
11 left in that.

12 Q. This piece of foil, this item
13 that we are looking at in Figure 18, it
14 would have very little thermal mass to
15 transfer to the transfer heat to
16 surrounding materials, right?

17 A. Well, again, we have already
18 talked about this, but we'll go through it
19 again, this slug, as you call it, right,
20 it's much more -- there's more mass to
21 that's utilized in your confetti answer,
22 right, but because of this, the mass of it,
23 and the energy that it has, that is going
24 to maintain that heat and energy longer
25 than utilizing your confetti explanation.

1 J. KARASINSKI

2 Q. So, is it your testimony that
3 the because it is the slug type projectile
4 rather than confetti, that it did have
5 enough energy at the time it contracted the
6 materials in the closet to combust -- to
7 ignite any combustible materials?

8 A. It is my opinion that based on
9 this material that I found in there, and
10 the other data that was collected during
11 our investigation and the processing of the
12 scene, that was the only available ignition
13 source that we found in the closet.

14 Q. Is it your opinion that the
15 ejector ignited the materials in the
16 closet?

17 A. I mean this is readily
18 available on YouTube, you can watch the
19 battery failures, and you can see them
20 shooting across rooms on fire, I mean, it
21 readily knows what happens.

22 Q. If it ejected the material in
23 the closet across the room --

24 A. When you say "across the room,"
25 if you mean two or three feet away, then

1 J. KARASINSKI

2 yes.

3 Q. So two or three feet away and I
4 appreciate the clarification, because I do
5 want to kind of nail this down. So it's
6 your opinion that the battery materials that
7 were ejected into the closet ignited the
8 combustibles, right, in the closet?

9 A. If the combustible materials
10 were ever stored in the closet, yes.

11 Q. So now, question is why, did
12 those same battery materials that were
13 ejected into the rest of the room, why did
14 they not ignite anything?

15 A. You didn't have any fuel
16 adjacent to them, right.

17 Q. What about all the papers and
18 all the stuff we looked at?

19 A. We didn't find any battery
20 remains up in those shelves in the paper
21 areas. We documented all the remains that
22 we found and we put tents on those. So
23 again -- and it also depends on if you --
24 when you -- if that battery, when it expels
25 its contents, maybe it expels it after it

1 J. KARASINSKI

2 lands on the ground or flies through the
3 air or does it expel it all right as it's
4 sitting in the laptop?

5 Q. I'm following along. I'm just
6 trying to find that diagram with the tents.
7 I know you made it.

8 A. Can you go back, down, down one
9 more though. Keep going, keep going, keep
10 going, keep going, I'm looking for the --
11 you can see some of the materials I have
12 pictures of, the one NFPA caps and the
13 garbage can.

14 Q. NFPA caps in the garbage, we
15 looked at this one together, right?

16 A. Yeah, go down, go down, okay.
17 So you can that caps in the garbage can.

18 Q. We are looking at in 61?

19 A. Yeah, there's no combustible
20 material in the garbage can.

21 Q. It's empty right?

22 A. There you go.

23 Q. So again, if you go back up to
24 the cell on the carpet, we talked about
25 that, right, the carpet is on a horizontal

1 J. KARASINSKI

2 fuel configuration, if the cell landed, it
3 was still expelling, but it didn't have
4 energy to ignite the carpet, but you take
5 that same energy and you put that energy in
6 that closet with the combustible material
7 and the contents of that closet, now you
8 have that combustible material to unlike
9 where we found the other material or masses
10 from the battery that did expel?

11 Q. I'm going to take 60 seconds to
12 speak with my co-counsel, and then I'm
13 hoping to have you and Ms. Schweke done by
14 5:30. So if everybody can just stay on,
15 I'm just going to go to mute, and I'll be
16 back on in 60 seconds.

17 A. You got it.

18 Q. All right. So, Mr. Karasinski,
19 thank you for bearing with us. I just have
20 a few very brief questions. The first
21 being, have you understood all of my
22 questions today?

23 A. I believe so, yes.

24 Q. Is there anything else you want
25 to tell me about this fire or your

1 J. KARASINSKI

2 investigation of Marcellin notebook?

3 A. Not at this point, I think we
4 pretty much covered it.

5 Q. Did you conduct any other
6 physical testing of your hypothesis other
7 than what we've talked about today?

8 A. No.

9 Q. Well, thank you again so much
10 for bearing with us and for doing this
11 while you're traveling, I really appreciate
12 it. With that, I'm going to turn you over
13 to Attorney Schwarz, I appreciate it. Nice
14 meeting you and thanks for making it.

15 A. Thank you for making it a nice
16 conversation.

17 Q. I appreciate it.

18 MR. SCHWARZ: I have no
19 questions, so we can close the
20 deposition.

21 (Whereupon, at 5:26 P.M., the
22 Examination of this witness was
23 concluded.)

24

25 ? ? ? ?

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
24
25

J. KARASINSKI
D E C L A R A T I O N

I hereby certify that having been
first duly sworn to testify to the truth, I
gave the above testimony.

I FURTHER CERTIFY that the foregoing
transcript is a true and correct transcript
of the testimony given by me at the time
and place specified hereinbefore.

JASON T. KARASINSKI

Subscribed and sworn to before me
this ____ day of _____ 20__.

NOTARY PUBLIC

1 J. KARASINSKI
 2 E X H I B I T S
 3
 4 ^ PLAINTIFF ^ DEFENDANT EXHIBITS

5
 6 EXHIBIT EXHIBIT PAGE
 7 NUMBER DESCRIPTION
 8 A Report 63
 9 B Rebuttal Report 65

10
 11 (Exhibits retained by Counsel.)
 12

13 I N D E X

14
 15 EXAMINATION BY PAGE
 16 MR. LEVITES

17
 18 INFORMATION AND/OR DOCUMENTS REQUESTED
 19 INFORMATION AND/OR DOCUMENTS PAGE
 20 (None)

21
 22
 23 QUESTIONS MARKED FOR RULINGS
 24 PAGE LINE QUESTION
 25 (None)

1 J. KARASINSKI
2 C E R T I F I C A T E
3

4 STATE OF NEW YORK)
 : SS.:
5 COUNTY OF KINGS)
6

7 I, MIRIAM SCHWEKE, a Notary Public
8 for and within the State of New York, do
9 hereby certify:

10 That the witness whose examination is
11 hereinbefore set forth was duly sworn and
12 that such examination is a true record of
13 the testimony given by that witness.

14 I further certify that I am not
15 related to any of the parties to this
16 action by blood or by marriage and that I
17 am in no way interested in the outcome of
18 this matter.

19 IN WITNESS WHEREOF, I have hereunto
20 set my hand this 2nd day of April 2025.

21
22
23
24
25

MIRIAM SCHWEKE

MIRIAM SCHWEKE



Magna Key Contacts



Schedule a Deposition:

Scheduling@MagnaLS.com | 866-624-6221

Order a Transcript:

CustomerService@MagnaLS.com | 866-624-6221

General Billing Inquiries:

ARTeam@MagnaLS.com | 866-624-6221

Scheduling Operations Manager:

Patricia Gondor (E: PGondor@MagnaLS.com | C: 215-221-9566)

Customer Care:

Cari Hartley (E: CHartley@MagnaLS.com | C: 843-814-0841)

Director of Production Services:

Ron Hickman (E: RHickman@MagnaLS.com | C: 215-982-0810)

National Director of Discovery Support Services:

Carmella Mazza (E: CMazza@MagnaLS.com | C: 856-495-1920)

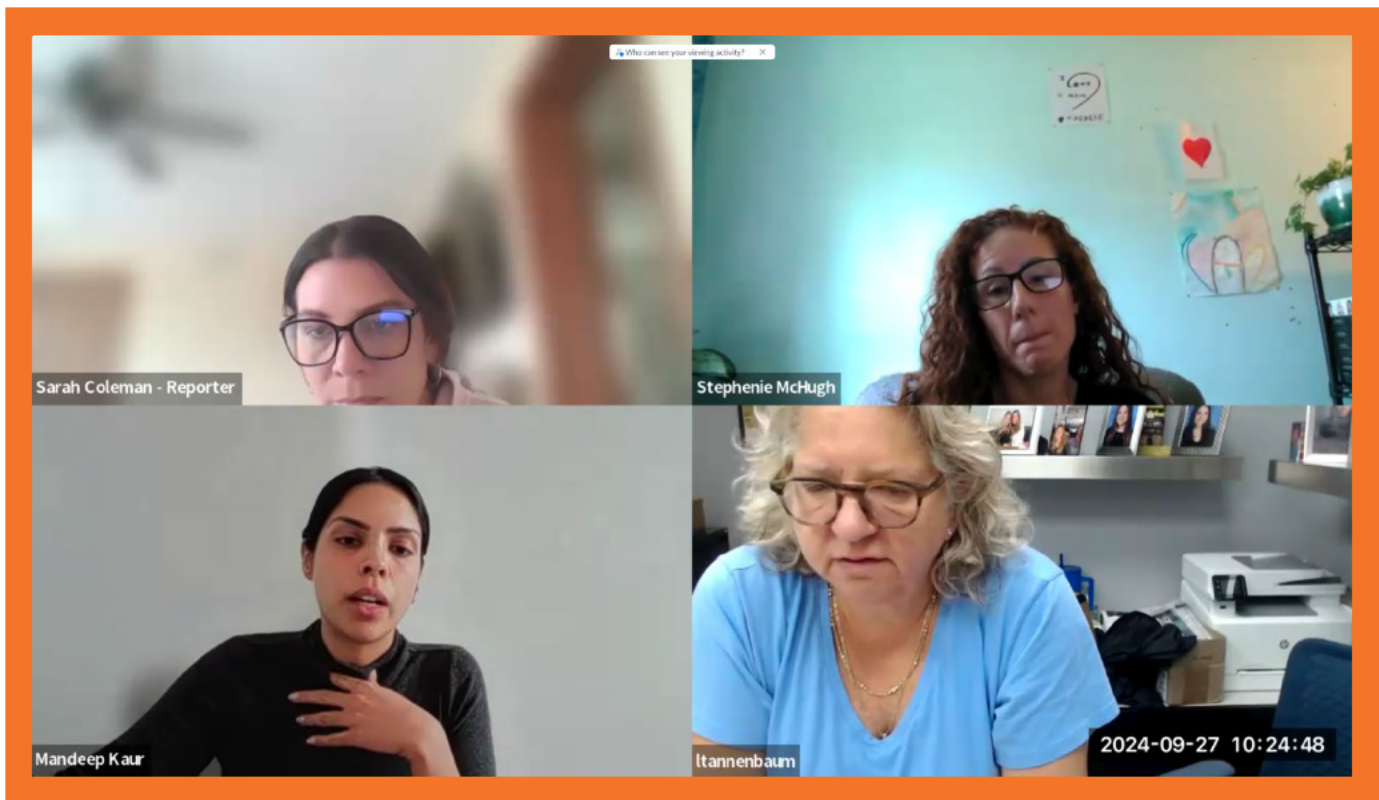
Billing Manager:

Maria Capetola (E: MCapetola@MagnaLS.com | C: 215-292-9603)

Director of Sales Operations:

Kristina Moukina (E: KMoukina@MagnaLS.com | C: 215-796-5028)

Magna Litigation Screen Grab Preview



The video of this deposition may be available to order through our Magna VOD program. If this deposition was **not noticed** for video, all parties must approve of the production for it to be released to any party. Admissibility will ultimately be determined by a judge. Please visit magnals.com/vod to order.

A			
a.m	54:2,8,15,16,19,23	224:14,23 233:3,25	affect
1:15 183:2 205:16	55:4 56:10,18 58:13	actual	45:10 47:5 133:9
abilities	58:17,20	13:22 49:19 74:16	affidavit
129:14	access	92:15 100:10 101:9	23:16 24:6,20 25:4
ability	31:15 188:5 210:23	108:9 126:21	294:12
262:6	211:6 291:11	150:21 184:9	afoot
able	accident	295:17	226:3
12:17 57:9 73:18	295:13	add	aftermarket
80:23 81:5 88:2	accidentally	250:7	121:16 127:21 128:5
93:11 94:4 96:8	203:24 205:23	added	128:15 130:4,9
100:9 118:3 131:20	accidently	58:4 61:22 294:3	131:22
143:4,11 151:2	203:11	adding	against-
162:10,24 163:5	accommodating	60:20	1:8
167:9,14 189:10	13:4	addition	age
245:8 269:21 272:4	accreditation	258:19	100:6,19,22,25
286:9 288:5,5 291:7	35:2	additional	101:12 132:11
291:10 292:3,6	accumulate	18:22 19:2,7,12	agency
294:18 305:22,24	154:17	22:23 24:14 234:6	110:21
310:2 312:18	accuracy	275:5	ago
absence	14:4	address	269:8
217:25	accurate	4:12 19:14 234:12	agree
absolutely	57:10,11 59:10 86:21	274:12	5:9 7:20 8:8 14:2,7
27:17 78:16 94:17	133:4,8 152:3 201:5	addressed	14:13,17 15:13,23
110:2 164:25	294:18	20:3 274:22	16:14 29:23 94:7
186:19 196:22	action	adequacy	95:2 123:13,17
203:25 205:6 209:9	321:16	14:4	154:15 170:17,19
234:12 267:15	actions	adequate	176:18 177:9
284:19	250:10,15	15:15	186:10 196:19,23
abuse	activate	adjacent	198:8 238:12 244:2
43:16,25 109:3,4	145:15	15:21 139:11 155:6	260:24 294:21
302:25 303:2	activated	227:25 228:2	308:24 311:3,8
abutted	142:19 143:24	311:12 315:16	313:4
278:15	144:11,13 153:24	adjoins	agreed
abutting	154:3 186:9 197:5	278:22	3:5,20 12:10,11
278:18	activates	adjuster	88:18 178:3 180:5
AC	145:15 147:20	38:19 310:14	249:12 260:2,6,8,14
156:17	activating	administer	260:15,18 261:10
Academy	197:8	3:11	261:11 263:21
245:25	activation	admission	265:12 276:5
accelerant	154:8 288:18	256:13 309:4 310:6	agreement
266:20 282:22	active	advised	18:23,24 19:15 73:12
accelerants	70:6,25 81:4	51:15 96:6 186:5,13	agreements
266:11,14,15	activities	187:6,7	275:4
accepted	87:12	advisory	ahead
	activity	55:21 56:7,23 57:21	81:16 151:16 155:4
	222:17 223:11	58:9 261:8	air

46:11,16 47:16 207:19 316:3 airflow 155:19 156:24 298:13 airtight 156:18 245:20,22 alarm 135:20 136:2,6,12,20 138:21,23 139:3 140:21,24 142:4,9 144:10,17 145:2,7 145:24 146:10 147:18 149:10,18 150:17 182:18 183:15,16 186:9 187:9 288:18 289:24 alarm's 153:23 alarms 136:24 137:11 138:20 139:9 141:7 141:9 148:5,8 154:3 154:5,8 183:5 alerted 143:24 144:13 alive 180:21 269:21 278:5 alleged 184:13 243:24 Allegheny 160:20 161:4,6,20,21 164:21 allow 7:5 208:5 allowed 22:10 88:9 allows 22:5 250:10 alterations 95:8,12,16 122:12 altering 122:16 alternate 254:20	Amazon 128:12 ambers 230:10 232:17 ambient 45:24 46:7,19 99:4 amount 25:21 57:4 152:3 153:9 158:3,7,9,18 246:15 278:4 299:18 306:2,5 313:10 analogy 152:25 279:2 analysis 35:23 47:17,20 49:25 91:23 133:10 144:4 190:21 221:23 234:18 242:22 243:6 247:10 254:9 260:5,17 261:5,9 271:15 275:15 306:8 307:5,25 analyze 52:17,24 56:20 57:9 111:11 220:18 analyzing 52:20 AND/OR 320:18,19 Andy 35:12 225:11 257:22 268:21 306:24 308:12 angle 296:15 annual 59:2 answer 6:21,21 7:4,6,13,14 9:2,9 12:18 16:21 21:8,24,25 27:12 49:24 72:24 103:8 127:5,7,9,11 146:11 147:13 148:7,15,17 149:3 150:23,25	151:3,11 152:9 153:3,16 157:2,17 166:21 167:20 175:16 177:13 178:15,20 192:17 194:5 195:3,4 202:25 203:3 231:25 233:5,10 240:13 242:11 260:16 289:23 313:8,21 answer's 10:25 answered 18:5,17 22:8 124:16 152:10 195:12 answering 124:19 answers 8:18 26:20 27:3,6,19 27:22 310:13 anticipate 6:25 32:2 anticipated 75:16 anybody 10:4 56:25 309:10,11 anybody's 295:14 anymore 31:13,16 265:5 307:25 apart 122:11 apologize 10:2,13 23:22 52:12 114:12 146:5 161:7 161:15 199:21 210:10 253:5 310:23 appeared 241:9,11,12 appears 65:18 86:17 182:8 284:22,24 appliance	14:8,14 15:4,14,19 15:24 16:9,15,19,24 259:6 appliances 17:3 applied 254:6 apply 99:11 254:9 appreciate 6:25 7:2 13:2 62:15 77:12 272:15 315:4 318:11,13,17 approach 263:12 approached 287:25 appropriate 27:2 51:8 256:8 307:24 appropriately 291:5 approve 61:25,25 approved 92:13 approving 61:21 approximately 39:14 185:5 213:12 226:10 April 321:20 apt 256:5,8 arbitrations 37:22 arc 62:10 224:7 257:24 258:6,6 arch 257:20 arcing 221:24 222:3 257:24 258:17 area
--	---	---	--

19:15 30:23 47:19 117:12,16 118:8 120:14 138:24 164:20 168:5 169:7 170:15 172:22 204:8 233:14 237:3 251:7 260:25 261:2 262:24 263:16 265:11,20 269:6,12 269:18 270:25 271:12 273:2 276:5 295:8 301:23 312:3	96:4,5 103:14,17,23 105:14 109:15 125:16 145:3 152:10 153:6 157:18 162:13 163:8 178:14 233:22 252:10 260:10,12 262:4 265:12 280:4,12,14 287:17 288:13 289:5 291:4,15 293:5 307:16	assumed 9:3 assuming 95:25 203:4 206:25 211:3 297:21 assumption 101:15 ATF 245:25 attached 102:23 233:6 attack 16:20 107:16,17,20 107:20 108:4,7,7 109:13,13 196:7 197:17 216:7 225:17,19 266:23 303:24 attacked 217:6,8 222:7 attacking 194:23 attacks 107:25 attainment 36:11 attempt 298:18 attended 77:19 89:6 attention 137:12 175:11 188:21 attorney 4:20,25 9:13 10:6,15 20:24,25 21:3,18,19 21:23 22:5,7,9 24:19 79:6 291:18 293:8 318:13 attorney/client 20:11 Attorneys 2:4,11 audio 40:2 authored	75:19 authoritative 54:2,8,13,14,19,23 55:4,6,8,18 56:4,8 58:8,12,18 authorities 25:18 26:11 135:3 authorized 3:11 automatically 233:17 available 44:21 131:9 314:12 314:18 average 151:4 awake 176:4 182:17 203:8 203:20 205:16 awakened 135:19 award 39:3 aware 25:4,7 26:17 27:18 27:21 51:20 55:12 61:12,13 62:12 76:16 77:25 78:6 91:10 93:5 102:13 108:24 109:2 167:13 184:16 199:12,22 awoken 289:11
areas 113:25 168:8 208:17 228:4 241:25 298:5 298:6 315:21 armoire 94:14 297:6 arms 164:9 166:12 arrived 263:8 295:3 arriving 89:13 arrow 212:10 arrows 295:21 arson 71:14 72:18 81:10 268:24 269:5 articles 41:3,11 53:22 Articulates 192:15 articulating 231:18 ascertain 95:15 ashtrays 119:21 aside 11:20 182:21 195:20 asked 18:13 19:2 22:11 29:15 31:23 51:18	asking 4:20 7:5,7,9 16:19 17:7 38:10 76:13 121:25 128:6 148:8 148:17 177:12 183:19 191:6 198:7 207:3 220:10 239:21 253:7,11 257:15 264:8 271:20 asleep 134:18 135:6 178:7 182:18,20 183:2,3 186:21 187:7 200:8 267:23 aspect 44:2,3,4,5 aspects 44:14 307:4 assembly 296:8 assessing 188:23 assignment 79:13 assist 35:19 79:21 assistance 35:22 93:24 Association 37:2 53:19 assume 45:23 153:6 202:22 261:23	assumed 9:3 assuming 95:25 203:4 206:25 211:3 297:21 assumption 101:15 ATF 245:25 attached 102:23 233:6 attack 16:20 107:16,17,20 107:20 108:4,7,7 109:13,13 196:7 197:17 216:7 225:17,19 266:23 303:24 attacked 217:6,8 222:7 attacking 194:23 attacks 107:25 attainment 36:11 attempt 298:18 attended 77:19 89:6 attention 137:12 175:11 188:21 attorney 4:20,25 9:13 10:6,15 20:24,25 21:3,18,19 21:23 22:5,7,9 24:19 79:6 291:18 293:8 318:13 attorney/client 20:11 Attorneys 2:4,11 audio 40:2 authored	75:19 authoritative 54:2,8,13,14,19,23 55:4,6,8,18 56:4,8 58:8,12,18 authorities 25:18 26:11 135:3 authorized 3:11 automatically 233:17 available 44:21 131:9 314:12 314:18 average 151:4 awake 176:4 182:17 203:8 203:20 205:16 awakened 135:19 award 39:3 aware 25:4,7 26:17 27:18 27:21 51:20 55:12 61:12,13 62:12 76:16 77:25 78:6 91:10 93:5 102:13 108:24 109:2 167:13 184:16 199:12,22 awoken 289:11
<hr/>			
B			
<hr/>			
B			
320:2,9			
back			
13:19 58:11 61:23 62:4 67:6,7,10,17 67:18 72:7,9,15,21 72:23 76:8 84:9 88:9,13,17 95:24 96:13 99:12 107:8 109:7,14,24 118:9			

109:7,14,24 118:9 118:23 119:10 120:12,24 121:7 127:22 162:7 163:13,22 164:6,10 164:18,23 174:4,9 174:18 175:11,17 175:18 176:8 177:15 180:20 188:16 205:18 214:9 218:22 220:6 221:18 222:12 223:12 231:2 238:18 242:10,14 281:4 282:24 283:24 284:2 287:4 288:21,22 289:25 290:13,23,25 291:6 292:23 298:10 299:16,22 300:9 306:25 308:5 316:8 316:23 317:16	ball 152:13 bank 159:4,11 192:3,12 213:22 banked 154:18 155:15 213:11,15 banking 124:25 166:24 172:15,16,19 194:22 213:23 214:15 215:20 216:16,24 301:6,8 barbecue 152:18 barbecuing 152:16 base 198:25 based 19:22 20:14 30:11 34:25 42:19 43:22 47:13 49:8 50:24 55:19 93:24 98:8 104:15 117:13,21 117:22 118:6 132:11 133:4,8 143:2 157:5 163:17 167:21 175:15 181:9 182:19 183:12 195:16 199:3 208:8,8 209:25 210:2 217:14 218:10 222:3 226:20 235:15 240:2 248:4 257:3,9,18 263:16 263:18,19 265:18 268:11 269:19,22 271:15 279:7 290:16 291:17,25 294:16 302:2 306:2 313:9 314:8 basically 42:22 113:6 165:5	177:7 179:12 270:3 300:18 305:12 310:16 basics 156:24 basis 53:8 56:13 59:2 76:12,18 122:11 bathroom 162:25 281:5 290:2 batteries 41:12 42:5,6 45:16 47:5 72:25 73:3,5,7 73:15 74:6,13 80:11 80:13,15,17 91:18 91:20 99:11 100:12 101:17 102:10 158:11 194:18 196:6,11 197:18 215:17,25 227:12 229:14 241:20 253:3 282:21 290:7 302:23 303:7,23 307:2 battery 16:10 17:8 40:6,7,9 40:12,23 41:6,18 42:8,9,11 44:15 46:14 51:17,19 52:25 60:25 61:2 73:9,19 80:19 91:22 92:2,7,9,11,12,19 92:22,23 93:9,16 94:2,21,23 95:5,13 95:20,24 96:7,9,24 97:4,10,12,17 98:3 98:5,12 100:6,7,9 100:23 101:5,22 102:14,22 103:18 104:4,6 105:23 106:3,11,19 107:11 108:2,2,25 109:17 112:13,22 113:22 113:25 114:5,20 115:5 121:17,18,21 122:3,6,15,19,24	123:9,14,15 124:4 124:12,17 125:9,15 125:22 126:8 127:21 128:5,15,18 129:4 130:4,9,13,15 130:19 131:22 132:8,10 133:17,18 138:24 139:8,21 140:13,19,19 141:3 141:9,16,22 144:20 214:8,14 215:3,10 217:5 218:20 219:12,14 225:22 227:3 229:12,17 230:2 235:6,7,17,20 236:15,21 238:15 244:5 248:5 251:14 252:2,4 254:3 286:25 292:12 302:11 304:2 306:24 307:5 309:23 310:11,25 311:5,25 312:6,18 312:23 313:6 314:19 315:6,12,19 315:24 317:10 battery-operated 60:19 138:23 139:3 139:20,24 140:24 battery-powered 107:4 beach 230:24 bearing 273:21 317:19 318:10 beat 302:23 Beaton 201:7 203:6 Beaton's 204:11 bed 134:17,19 135:6 161:2,23 163:13 164:6,11,18 165:5
--	--	--	---

166:7,11 168:3 169:6 170:12,14,16 170:18,21 171:6,6 171:11,16,21,22 172:2,7,9,23,23 173:3,21,25 174:6 175:14 176:23 177:2,5,7,9,17,18 177:22,25 178:7,10 178:24 179:11,21 179:24,25 180:4,7 180:14,15,21 182:7 182:9 183:2,3,15,23 203:24 267:2	believe 11:16,25 17:13,19 24:8 28:6 33:2 36:20 38:16,20 39:5 64:5 68:6 70:20,22 71:2,4 72:17 81:8 87:19 93:7 94:4 99:7 102:23 109:15 122:21 123:11 126:9 130:22 134:16,20 146:11 156:17 159:2 160:10 162:4 173:8 173:15 183:3 188:14 189:3 198:22 220:7,15 221:6,8 228:12,14 236:17,20,23 242:9 251:9 261:9 262:3 263:16 282:23 288:15 292:8 304:8 304:17 307:16 308:12 311:11 317:23	40:21 66:15 103:16 203:19 264:25 265:6,9 bicycle 113:20 Biden 60:22 big 35:5 72:13 79:14 227:19 243:21,25 244:13 272:17 284:2 300:4 bigger 63:15 274:7 284:18 billed 78:8 billing 66:10,11 78:13,13 billow 150:16 bills 78:25 bird 262:21 bit 30:9 31:10 39:22 64:17 161:12 231:3 243:14 246:17 247:2 294:7 296:18 297:4 302:9 309:5 black 117:21 blamed 80:17 blanket 174:9 179:23,23 180:12,16,19 blankets 174:3 180:24 blew 229:21 blood 321:16 blow 83:9 204:14,15 blowing	199:6 292:20 blown 63:23 218:13 BMS 101:6 board 102:22 213:8 266:7 body 164:20 165:4 166:11 175:21 177:15 178:18 boiling 197:10,12 bond 297:24 299:16 bonfire 297:22 Boston 2:12 bottom 67:25 70:17 208:2,24 227:17 231:5 240:10,10,11 241:22 298:13 300:6 bought 66:18 123:16 184:7 bounce 248:13,14,14 bouncing 194:21 box 88:24 200:19 229:25 297:14 298:9 299:6 boxes 298:25 break 7:23 9:6 68:12 82:24 83:3,4 126:20 135:11,13 202:21 235:10,13 242:5 273:22 breaker 88:24 90:5,17 219:22 219:23 220:19,24 221:3,4 222:2,10,11
bedroom 31:15 119:11 120:23 120:24 121:7 136:2 136:10,14 137:4 138:22 139:11,13 139:25 140:12,22 141:14 142:5 143:4 144:19 145:10,19 146:14,20 147:10 147:24 149:19 150:20 155:2,5,6,9 156:16,22,22 164:7 167:23 169:11 186:21 190:12,20 260:22 292:3	believed 30:12 32:12,19 94:21 96:6 140:13 144:19 believes 276:16 believing 270:23 Ben 4:16 189:22 BENJAMIN 2:13 best 54:9 57:22 BETKE 2:10 better 63:20,21 83:8 89:3 93:2 94:6 97:24 109:20 202:19 242:16,17 243:3 307:5 beyond		
bedrooms 121:4 began 213:13 beginning 67:20,23 115:16 149:17 243:15 280:20 begins 68:24 83:13 194:8 275:10 behalf 69:6 Belanger 79:20 belief 30:17			

223:12,13 224:10 232:21,22,22,25 233:22 234:16 breakers 234:20 258:9 breathe 168:2 169:5 breathing 172:21 Brent 12:4 brewing 205:5,9 Brian 87:19 brief 36:9 38:3,12 88:14 317:20 briefly 4:15 71:5 bring 35:6 51:16 149:11 broad 149:2 broken 212:6 278:8 brought 18:12 19:13 37:19 268:18 276:6 buds 242:15 Buffalo 72:12,14 building 75:22 76:6,21 154:2 188:19 191:5,7 256:23 bullets 110:8 bump 223:8 bumped 223:22 258:15 buoyancy 191:18 burn	117:24,25 172:2 207:13,14,23 208:6 244:21,24 246:2,21 246:22 269:5 279:4 298:20 299:7 300:8 burned 107:22 118:5 159:17 171:22 172:9 231:10 246:23 247:13 296:24 297:11,18 299:2 301:25 burner 149:12,13 burning 158:17 166:23 216:23 248:6 279:4 297:13,15 301:7,20 burns 244:19,19 burnt 117:19 172:3 245:24 290:9 297:12 business 36:19 88:5 busy 77:10 button 183:16 202:20 buy 202:14 <hr/> C <hr/> C 2:2 319:2 321:2,2 calculate 143:5,6 calculation 167:13 calculations 143:2,16,18,19 147:14,15 157:7,8 167:8 226:20 California 107:22 call	20:13 31:3 55:18 74:14 85:5 113:13 162:8 164:16 166:22 187:12,19 187:21 189:11 191:2 216:22 238:4 240:15 244:25 295:2 313:19 called 4:3 48:14 71:13 189:3 293:12 calling 130:6 238:7,13 247:5 304:7 calls 71:12 74:16 188:25 cancel 116:13 candle 116:8,15,24 117:11 117:23 118:4,5,7,13 120:14 121:6 262:24 264:7,19 candles 115:23,23 116:6,12 116:14 117:5,7,8,11 118:11,16,22 119:2 119:25 120:6 121:10 132:17 262:17,18,20,21 264:13 cap 118:3 capable 258:25 259:9 caps 196:14,14 237:5 316:12,14,17 caption 212:8 captioned 289:14 capture 8:18 car 151:7,8,11,14,17,22	151:24 164:16 187:20 189:7 295:13 303:4 card 128:11 career 246:4 Carol 1:3 2:5 4:21,24 11:19 19:17 20:4 22:12 26:18 27:9,21 153:16 209:19 276:6 carpet 228:7,21,23 229:2,23 230:5,9,17 232:11 232:13,15,16 266:21,21 301:12 311:10 316:24,25 317:4 case 1:8 4:18 10:5,15 11:23 14:3 17:15 20:21 21:9,14,24 22:10 24:16 26:20 27:19 32:18 33:7,23 34:6 39:21 49:3,11 51:14,25 52:23 61:10,11 62:7 63:8 64:13 66:15,20 70:21,25 71:17,23 72:18 73:9,10,24 75:12,21 76:24 78:4 79:10,19 80:20 81:10,11,24,25 82:3 82:4,5,12,12 83:18 91:23 100:18 101:11 102:6 105:14 114:14,21 118:14 131:23 144:24 148:2 149:17 150:3 160:8 165:24 166:4 172:8 181:13 184:19 185:3 195:22 198:7 204:7 227:25
--	--	--	---

234:18 236:19,24 238:8 239:7 249:2,9 250:8,16,17 252:9 253:21 259:20 260:23 264:6 268:7 269:11 270:2 278:16 306:9 309:3 309:6,21 case-maker 261:25 cases 46:9,22 69:5,13,20 70:16,19 71:6,14,15 71:18,20 72:25 73:2 73:6,8 75:7,18,25 76:2,10,13,20,23 79:24 80:7,8,12,22 80:24 81:7,12,14,17 81:19,22 182:24 227:18 248:25 251:14 253:7 268:25 298:24 cat 148:21 263:24 264:2 264:6,11,20 catch 204:19 233:18,19 category 184:24 237:19 cats 148:21 caught 42:4 causal 271:13 cause 14:9,16 16:20 43:21 43:21 45:3 52:9,11 52:12,14 53:22 61:5 75:23 76:20 103:24 105:12 109:5 110:14,17,19,19 111:2,7,14 114:6 144:5 195:10 197:17,24 209:8 216:16 220:25	221:22 224:3 225:2 242:3,21 243:6 250:5 273:10 303:20,25 310:12 caused 73:25 76:7 82:6 103:10 110:25 145:12 159:18 193:18 194:11 195:25 219:18 244:9 301:4 307:23 causes 76:4 109:11 111:17 causing 16:4,17 72:2 248:5 307:21 caveats 275:13 Cedar 245:25 ceiling 155:17 156:5,7,11 172:18 191:19 194:20 197:14 226:22 248:12,13 298:12 303:16 cell 40:13,16,24 99:5 104:16 106:19 113:6 158:15 159:14 160:2,10 187:18 189:4 228:21 230:16 232:6,9,12,17 302:17 310:2,4,14 310:25 311:5 316:24 317:2 cellphone 7:21 cells 42:20,25 43:5,14,16 43:18,19 44:7 45:2 47:9 73:17 75:3 91:14 93:5,20 102:21,25 106:12 109:19 113:17	159:17 160:3,7 195:7 196:15 217:25 218:5,12,13 218:21 219:20 228:17 229:3 241:24,25 242:2 246:23 251:24 283:17 292:17 304:2 cement 107:6,8 Central 36:13 certain 30:16 115:15 certainly 17:25 26:25 90:24 91:3 176:17,19 178:4 277:12 292:5 295:9,9 303:20 certificates 36:22 certification 3:8 certified 36:23,24 182:16 certify 319:4,8 321:9,14 chair 62:8 173:6 258:6 301:13,15 chance 22:20 chances 294:23 295:11,14 change 15:21 21:8 26:20 27:19 57:2,16 61:2 101:6 117:4 118:13 124:4,12 134:12 141:25 157:2 175:12 180:8 195:23 260:22 262:21 309:20 changed 86:23 108:24 123:2	127:10 247:14 changes 58:2 59:19 60:21 61:23 62:24 104:14 109:2 changing 27:3,21 122:9,9,16 chapter 55:24 60:10,10,11,13 60:15,16 62:9,10,10 characterize 32:16 characterizing 157:23 charge 113:20 charged 106:15 charger 250:21 251:10,11,13 251:16,22,22 charges 37:19 Charles 1:4,5 2:5,7 4:25 187:8 284:4 293:3 charred 230:8,9 charring 229:24 232:10 265:8 298:7 299:24 310:19 311:9,11 checked 124:24 chemical 113:5 chemistry 302:12 cigarette 119:19 151:19,20 152:5 cigarettes 119:22 circle 227:2 304:18 306:15 309:2
---	---	--	--

circuit 220:19 221:11,13 224:10 232:22,25 233:22 234:16	close 78:20 227:4 276:9 297:10 309:2 318:19	314:23 315:7,8,10 317:6,7	249:17 310:18 314:7 315:9 316:19 317:6,8
circuits 88:23 222:4	closed 70:23 212:5	closets 31:14	combustibles 238:15,16 239:8 241:5 242:8 244:8 311:7 315:8
circumstances 24:13 110:20 250:9	closely 210:15	clothes 238:21,25 239:11,24 240:20 247:8 269:9	combustion 208:19 229:22 230:15 232:9 292:16
cite 61:14 62:16 124:19 135:24 147:3 157:9 160:25 206:9 250:2 279:24 280:17	closer 6:12 23:23 161:12 225:24	clothing 133:19 240:5,25	come 25:13 44:9,10 47:10 59:13 74:8 111:19 213:16 237:10,14 248:15 250:10
cited 161:8,20	closet 29:19,21 30:2,4,10 30:23 31:2,12,17,22 32:3,9 85:13 129:19 129:21,25 130:10 130:16 131:11,19 133:16,17,20 134:13 158:11,16 167:6,24 183:20 184:4 192:2 198:14 210:17 212:13,17 212:17,20,21 218:2 218:4,15,16,17,18 218:25 219:10,15 219:17 226:20,23 235:9 237:3,23 238:24 239:9,20 240:3,16 241:5,15 241:17,19,20 242:8 244:7,8,12 245:6 247:3 253:24,25 254:14 255:3,4,12 256:14 266:22,24 269:15 272:3,6 278:2,15,20,23 282:19 283:3,14 284:7,11 285:2,5,8 285:9,19 286:7,10 287:4,13 288:4,22 290:13,20,23 291:24 292:6,8 294:19 304:18 307:11 308:22 309:24 310:8,10,15 311:2 314:6,13,16	Co-Administrator 1:4,5 2:5,6	comes 191:22 209:16 249:13 287:4 288:21 290:23,25
claim 246:18		co-counsel 317:12	comfortable 240:3
claimed 85:12 153:18		coast 58:2	comforter 240:12
clarification 18:14 20:4 272:16 315:4		coffee 204:17,21,23 205:9 205:13,17,25 267:7 267:10	coming 47:17,19 167:18 193:23 232:9 282:9 283:6 285:19 286:7 286:16 290:22 300:22
clarify 77:24 113:2		cold 303:3	comment 57:2 61:24 62:4,6,22
clarity 19:16		colleague 10:7 39:19 52:16	comments 56:25 60:7 61:8
class 68:22		collect 20:16 66:19 224:16 260:13 262:6 306:18	committee 61:20
classification 110:17,23 111:2		collected 12:13 18:25 19:3 25:22 88:22 89:5 198:20 218:7 224:13,17,20 304:23 309:19 314:10	common 133:6
clean 206:2,3		collecting 131:11 132:22 218:9	community 133:2
cleaner 30:3,25 33:12		collection 15:9 66:23 88:22 111:19 252:8 255:9 258:22	compact 29:18,21,25 30:24 33:13 129:18 130:5 130:11,18,24 131:8 132:16 183:20 184:24 218:17
clear 167:20 177:21 180:3 236:12 289:8 291:13 293:25,25 299:23 309:12		combust 314:6	
clearer 293:23 294:12,15		combustible 227:24 235:8 236:8 239:2,16,19,19 240:4 241:2 247:2	
client 21:6 29:15 50:25 51:16 79:14 103:17			

companies 100:11	244:6	conclusion 15:6 83:13 116:7 254:23	98:12
company 13:9,20 17:19 38:18 67:12 100:11 102:2 273:12	comprises 64:3 90:19 192:13	conclusions 25:14 89:13 143:20 260:23 270:2	confirmed 129:19 219:23 223:12
compare 103:4 104:13 120:18	computer 16:11 29:19,25 30:24 37:9 40:4 41:16 49:6 51:17,19 52:21 52:25 67:12 85:3 92:2 95:9 97:5 100:8 101:22 121:12,19,21 122:17,24 125:11 125:17 126:7 129:25 130:15,24 131:4,8,12 132:5,7 133:16,20 134:6,10 158:8 161:13 183:19,20 184:6,9 184:21,21 193:22 193:23,25 194:7,17 194:23 195:6,8,11 196:5,16 213:4 215:20,21 217:7 218:14,17 223:15 228:3 242:24 243:24 244:4 251:11 253:23 292:21	condition 95:3 100:20 101:2 108:15,20 110:20 178:24 179:18	confused 285:11 288:11 289:7 295:16
compared 102:25 299:25		conditioning 46:12	confusing 8:22 40:18 284:22
comparison 100:2,4,13,16,21,25 101:11 104:10		conditions 44:13,14	connect 44:7 189:8
comparisons 102:7		conduct 21:14 247:10 318:5	connection 102:6
compartment 191:12,16 192:24 193:8,9 208:13 303:12		conducted 149:15	connections 43:19,20 44:10 47:13
compartments 143:7		conducting 34:21	consider 53:25 54:5,7,23,25 55:3,5,7,19 56:17 78:2 90:4,6,23 111:23 112:7 118:25 122:8 125:14 204:6 209:7 250:16 256:25 257:2,18 263:6,10 264:2,9,14 268:5
competency 111:23		conduction 193:4	considered 250:5 262:17 264:10 275:16
competent 112:3,5,18 236:2,21 236:24 240:15 247:6 250:6 272:2 274:22 307:10,21		conference 60:2 61:9 62:23	consist 116:3
complaint 184:13	computers 40:19,22 41:3,7 80:9 99:12 222:4	confetti 237:11,19 249:14,24 313:21,25 314:4	consistency 183:13
complaints 132:7	conceit 218:19	confident 136:12	consistent 17:2 28:4,6,7,13,18 28:22 30:12 45:25 46:8 119:3 125:5,8 128:16,19 133:22 162:3 185:16 186:5 192:10 213:4 217:20 218:24 233:24 254:24 261:16 266:22 267:22 271:7 311:14,20
complete 208:5	conceivable 164:17	confidential 73:12	construction 98:9
completed 57:12 90:3	concern 132:9	configuration 94:9,13,17 104:16 207:14,15 208:4,9 208:18,25 230:13 230:18,19 232:14 246:11,12 298:21 299:4 317:2	
completely 174:13 176:7 231:4 301:25	concerning 4:23 5:4 41:11 115:22 128:25	configurations 94:13 299:20	
completes 230:15	concerns 252:18	configure 232:14	
complies 127:15 138:3,8 175:2 190:3	concluded 75:22 76:6,19 117:16 123:8 224:6 275:7 318:23	configured 208:11	
components 94:19 106:3 237:6		confirm 93:10 94:5 96:8 98:6	

consulting 69:23	193:4	121:9 123:11 125:3	24:15 39:20 78:9
consume 298:15	conversation 6:24 255:16 270:10	129:23,24 130:5,13	205:18 320:11
consumed 297:18	294:7 318:16	136:18,21 137:7	Counsellor 42:14
consumer 96:21 122:7 125:12	conversations 9:12 12:7 18:21 19:5	140:16 141:17	Counselor 91:25 119:16 148:16
132:6	275:3	144:22 145:20	153:5 177:9 183:10
contact 44:10 47:10,12 255:3	cook 203:16	146:16,24 168:17	counter 186:4
contacted 17:17 79:7,20	cool 313:5,9	169:18 171:19	counterfeit 92:7,23 105:23
contain 112:14	cooled 247:16	176:24 179:16	country 37:4 50:16 54:12
contemplated 61:8 62:25	copper 311:20 312:22 313:5	191:19 198:13	countrywide 70:4
contending 186:20	copy 3:14,17 63:17,19	199:5,16 216:23	County 72:17 160:20 161:4,6
contents 55:22 112:12,15	64:7,8 83:8	220:12 222:16	321:5
114:5 149:14 160:4	cord 201:14 202:11,17	227:20 229:23	couple 15:17 200:12 218:12
206:17 210:16	251:9	235:3 250:20 255:5	239:4 241:10
212:20 214:6	cordless 188:5,18 189:15,21	263:5 268:18	243:12 256:22
219:16 228:25	190:11 267:8	277:14 279:15	269:8 279:10
238:8 244:24 246:5	cords 202:16 222:3	296:3 301:2 304:11	304:15
286:10 287:5	corner 207:20,22 208:3	307:13 311:17	course 4:19 13:14 16:7
315:25 317:7	212:23 246:11	319:9	38:10 52:2,8 75:24
context 124:22 126:19 136:8	corpus 270:17,20 271:4,7,19	corrected 289:2,3	105:5 137:18
continuation 189:24	271:24 272:8,9	correction 57:3 199:22	177:11 243:13
continue 8:17 159:4,9 192:8	correct 7:24 8:12 13:25	correctly 49:21 146:18 160:12	257:14 261:20
192:12	15:10 17:12 19:11	171:4 188:15	303:5
continued 104:2	21:16,17 22:14	235:11 252:21	court 1:2,20 3:13 4:18 48:6
continues 68:25 191:24	25:15 26:8 30:18	correlate 197:2 198:12	72:10 76:14
continuing 20:16	42:10 43:17 50:21	corresponded 222:25	cover 201:19
contracted 314:5	56:21 57:14 59:9,20	cost 128:13	covered 44:20,24 311:2 318:4
contractor 72:3	63:5 84:18 86:3,4	128:13	covering 200:20 206:18
convection	86:16 91:4 98:7	171:4 188:15	210:22 211:10
	102:13 105:15	235:11 252:21	243:12
	108:5,17 110:9	COUGHLIN 2:10	covers 175:8 176:22 178:8
	112:24 114:17	could've 217:6 296:17	178:11 179:8,12
	115:7,17,20 116:2	counsel 3:6,17 20:21 22:3	182:13
	117:17 119:7,11,12		

COVID 87:2 113:20 CPR 175:22 cracked 227:9 cracking 227:15 crannies 151:25 crawl 165:8,11,18,22 167:22 169:10 170:9,24 191:5,6 crawled 170:9 crazy 190:23 191:8 create 24:20 creating 20:7 creation 24:13 credibility 184:2 credible 29:6 credit 128:11 178:22 criminal 37:18 69:13 71:15 75:12 crimps 236:5 critical 77:8 106:2,5,5 309:3 crosswise 161:2,23 crystal 152:13 Ct 34:7,21 35:14,15 67:9,14 90:9,18,21 90:21 91:7 229:5 306:2,3,8,12	CT'd 67:12 CTs 14:23 34:3 current 59:15,16,23 68:4,6 81:23 currently 54:10 61:14 62:20 customary 5:20 cut 151:15 CV 38:6 64:4,8 67:17,20 67:23 68:3,7,18 77:13,16,22 78:5 <hr/> D D 3:2 319:2 320:13 daily 53:7 122:10 damage 15:14 106:12 107:2 107:11 109:12 204:9 206:16 209:12,14,18 211:18 212:9 214:3 214:5,21,25 215:7 215:13,22 216:6,25 221:2 225:22 226:2 226:25 227:3 241:21,21 244:9 259:11 265:8 266:21 272:25 273:10,15 278:4,18 278:25 292:2 295:25 300:18 301:5,14 302:2,3 305:23 306:2,5,9 310:19 damaged 15:25 16:4,16,20 143:10 206:21 207:8 208:12	225:16 227:6 231:14 308:19 damages 310:20 damaging 108:10 300:17 dangerous 43:15 44:3,15 45:3 dark 285:13 287:9,10 290:6 data 15:9 20:16 25:21 57:9 111:11,18 132:23 147:12 149:5 198:15,20 202:4 218:6,10 221:21 224:24 252:8,9 255:8 258:22 262:7 274:12 293:20 309:5 314:10 date 1:14 10:18 17:16 63:12 64:20,21 65:10 66:12 68:4 77:16 78:8 86:20 89:8 93:3,19 128:16 128:19 132:8,11 143:5 184:5 dated 65:13 126:25 dates 182:5 day 12:21 93:17 183:25 205:14,25 206:3,6 228:14 231:6 261:19 310:24 319:19 321:20 days 3:16 deal 53:7 76:11,17 178:5 185:6 death	21:24 307:24 debating 270:15 debris 35:17 120:14 139:5,7 139:21 141:2 decay 196:7 deceased 1:4,5 2:6,7 120:24 134:17 174:17 December 65:13,16,23 85:21 99:12 declaration 20:8 23:17,24 25:3 28:3 275:24 279:12 284:13,15,23 288:8 290:19 291:16 293:6,22 decoration 118:16 decreases 172:19 defect 303:8 defects 303:8 defendant 1:20 4:17 69:9 274:13 320:4 Defendant's 63:10 65:9 Defendants 1:11 2:11 39:20 defense 69:11,16,17 70:2 251:14 deferring 108:13 define 17:6 34:17 92:13 101:16 106:5 definitely 43:12 295:6 definitive
--	--	--	---

72:24	deposition	102:19	276:19
degree	1:18 3:8,9,14 6:3	detail	difference
15:13 36:12,17,18,19	7:22 8:11 9:15 10:2	239:23 294:3	13:3 299:23
303:18	12:18 22:22 23:3,6	detailed	differences
degreed	23:8,14 25:2 27:25	125:14	104:14 270:16 299:8
53:6	39:22 97:15 137:9	detect	different
degrees	143:7 157:8,15,24	285:18	15:17 21:9 34:23
46:4,6,23 47:6,7	170:2 178:22	detector	35:3,3,3 82:21
197:11,13,14	185:15,20 186:7	142:18 143:3,24	111:2,3 112:17
276:10 296:12	189:2 279:17	144:3 149:16	113:24 122:3 148:9
Dell	318:20	153:10,14 197:4,7	148:20 195:4 198:6
13:20,23,25	depositions	detectors	221:13 231:24
demarkation	18:6,13,18 19:8 23:9	136:9 139:19 143:10	239:5 248:25 249:8
300:24	26:10 277:12	determination	262:4 279:16
department	derived	94:5 242:21 243:6	282:11 299:12
11:3,10,12 166:15	18:10	determinations	301:15 306:4
167:3 175:20	descend	271:11	differently
177:16 180:22	300:16	determine	190:17
204:3 210:18	descended	48:21 57:10 90:5	difficult
234:25 280:6	172:6	103:23 104:5,15	101:7 134:3 243:2
293:15 295:3,7	describe	108:14,18 110:14	difficulties
department's	35:24 106:18 112:25	111:7 112:2 120:13	161:18
164:22 263:19 277:5	114:25 149:20	186:16 221:19	dining
depend	237:15	275:6 305:22	156:3
249:10	described	determined	dinner
depending	24:12 135:21 194:20	93:15 196:20 251:6,9	264:20
15:19 21:7 60:22	271:22 289:9,12	251:21	direct
depends	299:15	determines	137:12
121:24 122:13	describing	15:16	directed
170:14 191:8	158:4 230:21 235:10	determining	24:14 97:24 307:5
198:19 206:23	description	111:22 250:5	direction
245:17,18 300:20	19:23 88:14 320:7	develop	156:20
315:23	descriptions	15:10 252:11	directions
depicted	35:4	developing	112:17
193:18 194:10	design	191:15 192:24 255:7	directly
195:24 211:25	37:9 40:6,8,10,13	devices	79:8,17 118:2 198:11
214:21 227:4 229:4	52:21,24 61:3 98:8	7:22 104:17 258:24	202:23
230:2 304:18	98:9 105:6 106:10	259:8	directs
306:10,15 309:17	106:23 303:8	diagram	250:4
depicts	designated	191:11 259:20	disagree
116:24	50:6,7	289:18 316:6	135:5 177:10
depo	desk	dial	disagreed
66:13	94:15 188:15 269:18	149:6 257:6	260:20
deposed	despite	dialed	disassemble
6:6 17:11 29:14	220:20	257:8	102:18
151:24	destructive	die	disbelieve

135:9 181:9 199:3 discard 119:19 disclosure 64:2 disclosures 274:19,21 discoloration 297:3 discover 194:25 discovered 32:20 158:2 183:4,5 186:8 discovers 193:25 194:24 195:5 196:9 198:2 215:24 216:18 discovery 196:25 198:11 discrepancy 261:3 discuss 33:10,15 50:17 209:5 256:9 discussed 181:3 268:17 discusses 118:11 174:20 206:12 270:19 discussing 242:7 discussion 10:9 60:7 61:15 271:6,18 dismantled 42:21,22 display 13:6 displayed 128:6 136:17 disposal 42:16 dispose 42:14,18 disposes	195:14 disposing 43:10,23 disproved 133:13,13,14,14 dissemble 102:15,20 distinction 92:10,21 217:23 distinguish 271:21 distribution 170:11 DISTRICT 1:2,2 division 296:19 doctor 140:4,6 document 56:23,24 58:7 64:5 65:19 126:14,15,18 126:19,21,25 261:7 documentation 88:21 131:2 263:13 documented 224:12,19 315:21 documents 8:2,9 9:19 13:5 99:7 320:18,19 dog 264:17 doing 8:16,17 32:25 79:11 86:18 88:3,8 106:17 133:3 186:12,17 187:4,17 189:6 221:15,16 253:12 261:17,18 280:6 318:10 dominant 192:22 193:5,14 door 131:7 136:9 139:13 142:12 150:3 151:7 151:10 152:17	155:6 156:21,22 167:18 192:4,9 209:19,23 210:22 210:23 211:16,20 212:3 223:7 245:18 265:2,2,3,8 273:9 280:13 289:24 doors 155:2,5,7,20 192:7 doorway 154:18 155:15 283:21 285:20 doubt 87:7 downward 197:17 213:3 Dr 92:3 97:24 98:25 102:12 108:13 109:9 123:5 128:17 129:8 185:7 193:19 194:12 195:25 302:10 draft 24:6 275:15,22 dramatically 86:23 draw 119:6 drawer 119:10 131:7 drawn 229:25 300:24 304:18 drill 107:4 drink 205:13 267:12 dripping 213:4 301:21 drive 187:22 driver's 276:12 driveway 249:4	driving 216:21 drop 107:5,7 dropped 107:11 302:25 drove 189:10 dry 44:24 drywall 248:9 due 76:15 274:20 duly 4:3 319:5 321:11 dumpster 43:15 44:20 46:24 47:6 dumpsters 43:5,22 44:2 47:9,15 duplicate 100:3 uplicated 105:2 dust 72:16 81:10 Dv6 84:17 dynamics 15:22 52:17 257:11 265:20 268:13 269:24
<hr/>			
E			
<hr/>			
E			
1:4,5 2:2,2,6,7 3:2,2 319:2 320:2,13 321:2,2			
e-mail 124:16,24			
e-mailed 68:13			
ear 242:14			
earbuds			

242:18	248:18	38:3	14:25 233:15
earlier	ejected	empty	ergo
31:23 102:3 122:23	158:15 235:22	316:21	145:10
128:3 217:11,12	236:15 313:6	ends	escape
252:6 257:13 265:7	314:22 315:7,13	68:2	150:17
303:22 311:15	ejector	energize	especially
early	314:15	73:22	251:15 298:8
12:25 135:12	ejects	energized	ESQ
ease	313:9	73:20	2:9,13
84:24	elderly	energizing	essentially
easier	205:24	74:13	74:18 87:7 132:6
243:14	electric	energy	177:5 247:4
easily	218:16 263:3	112:6 236:7 242:3	Estate
267:15	electrical	248:18 249:7,15,16	1:4,5 2:5,7
East	60:18 62:9 72:11	249:20,21 310:17	estimate
2:8	75:22 76:4,6,11,15	311:6 313:10,23,24	78:23,24 312:8
Eastbound	76:17,21 81:9	314:5 317:4,5,5	etcetera
106:4	220:22,24 222:17	energy-wise	255:4
eaten	222:23 223:3,11,14	310:9	evaluate
237:16	223:23 224:7,7,14	enforcement	305:8
echo	224:23 225:12	12:3 246:2	event
243:2	233:3,25 234:22,24	engineer	48:19,19 120:20
edition	256:23 268:22	37:6 53:4,6	140:23 196:4
59:15,18	electronic	engineering	208:23 209:16
EDNY	7:21	53:7	213:11,24,25
70:25	electronics	enlisted	215:14 220:22,24
education	96:21	37:11	222:5,24 223:3,24
294:16	elements	enter	225:2 234:25
educational	44:21 45:21	285:3,24,25 286:8,17	241:19 257:24
36:9 38:2 50:11	eliminate	288:8 292:3	258:8 283:18
effect	118:8 258:18 268:21	entire	292:14
3:12,15 146:13	269:22	65:19 90:3 111:18	events
184:18	eliminated	114:11 147:21	108:8 110:24 111:16
effort	265:18 268:11	166:25 258:22	236:4
7:13 12:20 132:3	270:23 274:23	262:10 298:16	everybody
efforts	eliminating	entirety	261:10 262:5 280:8
130:18 132:2 261:14	209:25 279:6	208:6 238:3	309:11 317:14
eight	elimination	entity	Everybody's
258:9	270:21 271:20,24	92:20 241:4	148:20
either	emergency	equalized	everyone's
61:21,24 71:24 77:23	188:24	167:17	120:19
89:25 115:24	emotional	equalizes	everything's
159:23 220:21	21:2,16	159:7,10 192:11	107:10
258:12 263:3	employees	Equally	evidence
296:24	39:6,15	7:12	12:13 14:22 18:25
eject	employment	equipment	19:2,22 25:12 28:19

28:22,25 29:25 30:7 30:14,22 31:8,19 33:2 34:2 35:16,18 66:19,23 88:16,20 88:21,22,25 89:2,5 119:24 120:12,17 122:25 130:12,14 131:11 132:23 134:12,23 139:18 141:17 146:12 181:18 185:24 194:17,18 195:16 195:20 196:12 198:16 199:3 205:20 211:22 216:11 217:15,22 218:3 224:5 252:20 252:24 253:8,17 254:7,10 258:20 260:11,14 262:18 263:11 265:14,22 268:16 270:5 271:2 272:11,12,13 294:15 297:9 305:6 305:18 308:10,17 309:3,15	91:12 93:4,8,15,18 94:24 96:10 102:18 102:19 120:11,13 130:13 132:10 280:10 305:5 312:7 312:20 examination 4:7 11:4,5 18:2 29:22 87:10 116:4 255:24 304:24 305:3 318:22 320:15 321:10,12 examine 14:22 286:9 examined 4:5 86:14,14 309:20 examines 109:19 examining 40:22 example 107:2,19 108:3 113:18 114:2,18 151:15,17 229:20 230:20 231:13 244:21 249:23 254:19 examples 109:15,17 224:2 255:21 exams 87:14 excavate 308:21 excavated 103:2 exceed 112:19 142:24 executed 24:2,4 exemplar 99:23 100:2,3,10,12 100:14,15,18 101:2 101:8,11 102:14 104:11 exemplars	102:5,11 exert 160:19 exhibit 38:7 49:6 63:8,11 64:2 65:3,6,9,22 67:18 82:17,18 86:10 135:15 274:4 320:6,6 Exhibits 320:4,11 exhumed 229:16 exists 271:2 exit 191:7 exited 293:2 exits 288:20 expect 15:5 101:10 131:3 157:15 158:5 165:23 169:12,16 170:10,25 171:22 172:9 206:20 207:7 207:11,12,16 208:10 214:24 227:9 309:25 expected 227:5 expecting 297:17 expel 316:3 317:10 expelled 113:23 114:5,21 228:25 232:7,17 254:3 expelling 215:17 228:8 290:7 292:17 317:3 expels 112:12 315:24,25 expended	158:12 218:5,12 241:20 expending 196:11 expense 67:9,11,13,15 expenses 66:8,14,17,20 67:4 experience 38:2,3 40:21,23 51:21 160:16 182:23 269:4 294:17 expert 48:6,15 49:14,18 50:6,8,13 51:2,13 51:17,20 52:6,10 64:2 81:18 93:25 94:2 252:23 261:11 270:12 274:19,20 302:11 306:25 312:6,18 expertise 97:25 103:16 122:2 experts 10:21,23 11:3,20,21 11:22 18:22 54:12 57:15 260:2,18,19 263:14 274:23 275:3 277:8 306:24 explain 207:17 270:13 295:16 explained 270:3 289:10 explanation 164:17 203:19 230:19 298:11 313:25 explode 112:16 explosion 72:17 81:10,23 82:5 110:22 Exponent 18:12 19:13 20:2
---	---	--	---

24:15 26:13 274:21 274:25 276:16,25 293:17 expose 257:23 exposed 222:5 231:9 300:7 exposure 223:19 272:25 extended 227:14 extensive 301:4 extent 251:25 exterior 88:5 107:20 external 108:4,6 extinguish 207:24 243:21 244:13,14 245:8 282:25 extinguished 195:3 232:18 243:25 extinguisher 186:2,2 244:17 245:9 245:11 283:8,25 284:2 287:3,14 288:21 290:24 293:2 extra 7:19 70:17 extraordinary 30:9 extremely 101:7 eye 177:25 204:19 Eyewitness 198:15	fabric 151:19 face 231:8 facilities 39:11 42:4,9,12 46:16 47:15 facility 10:23 11:5 35:20 39:13 41:16,19,24 41:25 43:13 44:16 45:15 46:7,10 89:7 102:19 108:2 117:24 160:17,17 fact 17:3 116:14 146:14 154:10 184:18 190:12,18 220:20 233:7 269:11 factor 15:18 46:17,21 factors 15:17 48:6,14 49:24 250:4,10,18,23 251:3,21 252:3,9 271:14 302:14 factory 72:13 81:11 128:22 facts 254:24 255:11 267:22 271:16,17 faded 23:21 fading 114:10 fail 113:7,17 159:18 194:8 197:18 248:6 303:7 failed 73:24 74:3 227:13 235:17 failing 195:7 244:5 fails 237:9	failure 49:9 72:4 91:22 103:10,24 105:2,12 112:11 214:8,14 215:18,25 216:13 219:12 235:5 241:23 259:2,12 279:9 292:11 310:11 failures 109:18 250:9,14 314:19 fair 13:23 31:8 34:12,13 43:2 46:17 47:21,22 52:5,18 56:6,9 58:20,22 59:4 63:3 75:17 76:25 78:22 80:2 82:7 83:16,22 90:19 93:23 101:3,4 115:2,3 119:13 123:3,4 125:11 141:20,21 145:13 153:21 154:13,14 178:12 182:10 194:14 216:3 219:9 234:7,8 235:14 236:14 237:18 247:8 248:17 254:4 270:9 310:20 fairly 146:12 fake 150:19 fall 163:10 falls 125:24 familiar 13:8,10 91:17,21 98:13 familiarity 6:2 99:16 109:17 fan 155:25 156:5,7,11 298:12	fans 155:20,23 156:9,25 far 5:17 8:17 72:21 131:17 276:16 Faraci 2:4 22:15 79:12,23 80:24 81:13,15,19 81:22 fast 70:8,13 198:15 faster 64:18 294:22 295:10 295:12 fatalities 82:2 fatality 20:23 21:10,15 faucet 159:22 fault 71:25 273:14 features 104:20 105:4,7,10,10 106:9 February 86:15 210:7 federal 1:21 2:12 72:10 234:14 feedback 221:10 242:25 feeding 221:18 feel 63:18 152:10 259:21 306:3 fees 66:24 67:2 feet 46:5 165:3 197:21 226:11 276:8 285:9 314:25 315:3 fell 162:5 felt
<hr/> F <hr/>			
F 3:2 226:23 303:19 321:2			

19:24 25:18 261:2 275:4 276:11 277:7 293:18 female 269:5 fewer 36:5 FFA 12:2,8 field 15:20 16:10 57:6 58:25 fighters 179:15 figure 103:15 105:22 116:11,12 118:10 119:6 123:21 124:20 129:10,11 129:11,12 130:2 147:4,16 160:21 185:11,21 191:11 191:21 193:18 194:10 195:24 199:6 210:4 211:13 211:20 212:2 214:22 215:8 224:9 225:13 226:15,25 228:9 229:15 230:3 290:18 295:19 300:10,13 304:10 304:19 306:10,16 307:7 308:25 309:18 311:19 313:13 figures 115:12,22 118:10 129:15,16 229:4,11 232:20 file 78:8 261:10 273:13 filed 4:21 files 72:9 76:22 filing	3:7 fill 149:22,25 192:2 filling 149:21 final 15:11 252:13 268:19 finally 245:6 252:10 find 27:23 28:3 29:5,24 30:13,19 32:13 100:5,9 101:7,21 126:21 133:5,9 137:10 138:23 219:2,5 222:16 224:22 251:13,15 256:3 257:3,25 258:10,11,12,17 272:4 310:4,5,10 315:19 316:6 finding 59:20 133:15 261:17 findings 82:20 233:25 fine 6:16 58:18 63:22 127:25 151:16 238:13 243:4 270:14 finish 7:5,15 12:21 88:7 205:25 finished 7:17 82:8 127:16 finishes 230:16 finishing 7:9 Firachi 69:7 fire 4:23 5:5 8:6 9:18 10:20 11:3,10,12 12:4 14:10,16 15:18 15:22,25 16:5,16,17	16:20 17:9,25 28:8 29:20 36:23,25 37:2 39:2,4,7,8 40:20,22 42:4 43:22 46:17,20 48:13 50:14 52:6,17 52:17 53:20,22 54:3 54:22,24 55:8,22 56:11,16,25 58:24 59:16,23 60:15 61:5 62:11 72:2,11,14 73:25 74:23 75:5,23 76:7,20 79:21 81:9 81:11,25 87:17 93:21 94:8 95:3,10 105:3,12 107:16,20 108:5,7,8,16,21 109:6,12 110:15,21 110:25 112:8 113:3 113:18 115:8 117:13 119:2,4 120:19 129:20 130:11 132:25 133:2,25 134:2,15 135:7,20 136:4 142:7 143:8 144:5,9 145:23 146:8 147:8 147:21 149:8,17 153:2 154:16 158:2 158:5,10,14,17 160:20 163:10 164:21 166:15,18 167:3,4,10,23 174:17 175:20 176:12 177:16 179:14 180:22 181:15,21,23 182:16,18,23 183:6 183:18 185:11,17 185:22,25 186:2,6,8 186:12 188:11 190:14,24 191:12 191:15,24 192:24 193:8,9,23,25 194:16,20,24,25 195:2 196:20,24 198:10,14,16,23	199:15,20,25 200:8 204:3,9 208:13,23 209:8,12,14,16,18 209:23 210:2,17 211:17 212:9 213:6 213:10,24,25 215:2 215:2,9,10,13,14,22 216:5,18,22 217:6,8 218:15,24,24 219:8 221:2 222:5,8 225:2 225:17,19 226:19 227:7,19,23 228:15 229:13,18 230:10 232:16 233:13,13 233:17,18,19 234:9 234:11,25 239:17 241:19,21 242:3 243:23 244:11,21 245:8,25 247:18 248:6,8 250:5,11 257:10,11 258:8 259:11 263:19 264:3,7 265:19,19 265:22,23,24,25,25 266:3,4,10,12,16,24 267:24 268:6,12,12 269:9,10,14,22,23 269:23 270:22 272:10 273:8,10 277:5,9,13,16,23,24 278:3,10,24 279:3,7 279:14 280:6 282:9 283:6,8,18,19,25 284:12 285:16 287:3,5,13,14 288:21 289:12,24 290:8,10,23 291:25 293:2,15 294:22 295:2,7,13 297:25 299:16 301:23 302:7,13,14 303:12 303:24 305:21 307:22 310:8 314:20 317:25 fire's 166:23 167:15
---	--	---	--

fire-car 113:21	251:18	303:16	force 3:15
fire-related 45:4 48:9 49:19	fits 251:19	Florida 39:11 41:25	forces 193:17 194:10 195:24
firefighters 177:6 178:17	five 79:25 80:4,6 81:21 113:24 152:24 205:10 245:5 246:6 246:14,20	flow 271:16 301:2 312:22	forefront 60:4
fireman 199:19,22 201:7 223:5	flame 207:22 208:23 244:23 245:2 259:14,16,19 266:13 310:18 311:7	flux 206:15	foregoing 319:8
fires 41:23 42:19,24 43:7 45:16 46:14 47:18 47:20 55:11 71:19 76:18 107:19,21 149:14 227:12 258:2 302:22	flames 159:23 230:6 282:17 282:18 286:7,16 290:22	flying 286:2,23 288:19,20	foreground 116:25
firewalls 283:10	flaming 208:19 229:22 230:15 232:8 292:16 298:8	focus 217:17 261:14	forensic 39:13 57:5
firm 76:10 79:6,17	flammability 247:11	focusing 309:15	forensically 14:21 209:10 268:9
first 4:3 5:2 23:5 87:19 110:13 111:6,15,24 112:4,6,8,9,21 113:8,11 115:5 126:18 136:22 145:12 160:24 161:21 206:14 210:6 219:13 220:2 222:6 223:21 235:10 246:17 250:7,13 254:5 271:12 274:3,10 275:9 279:20 282:15 283:23 284:6 285:22 286:21,22 287:16 287:18,24 288:14 288:16,25 289:5 290:4 291:21 292:9 292:22 294:4 296:14 304:15 307:8 317:20 319:5	flammable 266:6	foil 196:13 200:4 218:4 218:20 219:20 235:25 236:7,17,20 237:4,7,10,22 249:23 311:20,25 312:4 313:5,12	forever 134:8
first-party 69:15	flash 246:5,22 303:12,14	foils 244:6	forget 120:21
fit	flashes 283:17	fold 273:5	form 3:21 25:22 26:23 31:18 166:19 191:17 192:22 231:21,22 250:7 275:19
	flashover 245:4	folks 293:16	format 275:18
	flat 299:10	follow 20:16 25:23 54:10 57:24 59:13 83:7,16 252:7	forming 185:2
	fled 225:18	follow-up 16:22 20:13 26:12 257:19	formulated 271:13
	flies 316:2	followed 26:3 48:12 49:17	formulating 255:22
	floor 107:6,8 162:5 163:10 163:19,22 165:4 169:12 170:6,10,22 180:13,20 206:17 210:5,9 228:8 232:15 238:22 266:18,19 301:25	following 15:7 20:15 32:21 111:10 132:21 138:6 210:4 218:7 255:6 316:5	forth 13:19 67:6 82:19 321:11
		follows 4:6	forward 20:20 67:15
		food 204:5	found 28:13,18,21 29:2 30:7,22 113:25 128:17 130:22 139:2,20 140:25,25 141:11 161:2,22
		foot 171:5 226:6,8,11,14	

163:18 164:19 171:13 173:12 186:3 194:19 196:13,14 217:15 217:24 218:19 228:13 233:3 237:2 237:23 241:25 245:24 252:25 254:2,14 255:12,24 261:15 262:18 267:5 270:24 309:17 311:4 314:9 314:13 315:22 317:9 four 59:17 63:24 79:25 219:23 220:20 221:3,5 222:10,14 222:18,19,20,23,25 224:10,19,21 225:3 233:23 234:17 245:4,15 246:6,13 246:20 276:8 277:9 four-foot 201:14 202:16 213:12 four-year 36:16 FPDU 71:10,13,18 81:11 free 63:18 83:7 Friday 63:6 fridge 199:7 202:11 front 25:13 79:2 120:23 228:7 231:3 266:22 279:22 296:2 FRT 33:17,23 34:9 304:21 fuel 17:3,6,9 110:13 111:6,15,24 112:4,6 112:8,9,21 113:4,8	113:14 114:22,25 115:5 207:24 208:3 208:9,18,25 209:3 219:10,13,14,18 229:18 230:12 239:6 244:12 250:8 250:14 271:12,14 298:15,20 299:4,20 307:21 315:15 317:2 fuels 113:16 114:8 229:13 236:18 237:3 241:16,18,24 247:3 247:22 304:17 full 119:21 167:5 204:17 204:21,24 226:19 226:22 245:3,7,10 277:25 283:3,14 288:4 290:14,24 291:2,8 294:20 full-time 246:21 fully 167:24 282:19 283:20 284:8 291:24 fuming 154:22 funny 258:3,4 furnace 204:14 209:4,5,7,11 209:13,16,20 211:17 265:13 278:6,7,15,17,21,23 279:3,13,19 280:23 281:2,8,12 282:7 furnish 264:25 265:10 furniture 71:13 further 3:20 138:13 234:2 244:9 253:14 271:5	296:18 304:23 305:2 306:8 319:8 321:14 fuses 106:12 future 89:6 <hr/> G <hr/> game 38:7 gap 221:22 garage 89:3 107:5 113:19,21 113:23 114:14 175:22 176:10 garbage 180:17 311:12,12 316:13,14,17,20 gas 60:23 191:16 192:13 192:23 193:13 206:12,16 209:17 213:16 217:9 225:21 300:16 gases 171:24 gaskets 236:4 gasoline 253:16,17,18 general 27:2 34:15 69:8,10 87:12 89:20,21 97:18,25 143:13,14 251:8 generally 44:13 54:16 56:10,17 58:13,17,20 79:7 87:9 106:18 186:15 208:11 219:3 255:17 generated 60:6 generates	271:9 gentleman 173:14 getting 42:25 78:20 102:14 151:10 161:13 177:15 221:10 231:14 242:24 252:8 297:10 308:23 give 30:19 36:8 37:25 38:12 50:25 71:5 72:23 87:15 88:14 111:6 126:18 143:9 150:25 152:11 178:19 221:17 246:20 303:18 304:4 305:11,18 given 22:19 50:8 87:16 132:17 158:3,18 195:22 319:10 321:13 giving 7:6,12 114:17 142:20 224:2 244:20 245:23 glove 251:18 glow 279:19 282:9,18,21 283:2,6,13,16,18 284:6,9,10 285:15 287:5,12,16,18 288:23 290:4,5,11 292:25 glowing 199:13,24 202:7 203:5 glows 287:24 go 6:17 13:19 20:24 21:5,19 31:13 38:7 47:12 55:22 60:21
---	---	---	--

61:23 64:17 67:6,17 72:6,9,15 77:11 81:16 87:14 96:13 99:5 101:17 106:22 107:15 109:14 112:16 115:10 137:2,19 144:17 151:16 155:4 157:9 160:19 162:8,15,24 164:15,16 166:22 174:18 183:17 187:19 188:10,16 191:19 192:9 195:11 196:7 197:18,24 216:16 218:22 220:6 226:2 228:20 238:18 239:22 242:14 248:10,16 273:19 277:18 281:7,16,17 281:20 282:2,2,24 283:5 284:4 287:23 288:20 294:7 298:10 300:5,9 308:5 312:5 313:18 316:8,16,16,22,23 317:15	76:22 82:24 83:3,5 83:9 84:25 85:4 88:15 94:11 98:20 98:21 100:9 104:4 114:4,7,19,21,24 115:10,11 116:18 118:9 126:17,21 127:8 135:10 137:8 137:11,18 144:10 149:20 152:18,19 152:20,25 153:14 153:15 159:4,9,9,22 160:18 162:15 163:11 167:10 168:4,9,10 174:18 178:19 190:4 191:6 191:10 193:10 194:22 197:5,11,16 197:22 201:24 202:12,15,16 205:18 207:13,14 207:23,24 208:4,18 209:21 212:25 213:20 216:9 218:22 219:5 231:7 231:20,21 233:17 235:13 236:7 245:7 245:12,21 246:10 248:12 249:10,14 249:16,20 250:21 251:19 255:7,8,14 255:25 256:21 258:11 261:9 272:21,22 273:6,12 273:18 276:7 277:17,20 279:10 280:23,25 282:18 282:20,24 283:16 283:17 284:14,18 285:13 287:10 290:7 292:19 298:19,20 302:11 302:18 303:7 304:14 305:11,12 305:14,16 308:16 308:17 309:24,25	310:8 313:9,23 316:9,9,10,10 317:11,15 318:12 good 12:25 14:24 39:25 64:23 82:23 83:2 101:15 107:10 114:2 187:18 230:12 246:15 Gorbit 87:25 260:7,11 309:8 Gorbit's 130:21 gotten 62:11 147:23 162:7 164:6 310:2 govern 96:20 97:12 government 96:17 governor 87:8 grabbed 283:8 gradient 213:8 graduated 38:17 134:5 graduation 38:4 grain 132:19 Grand 71:16 75:12 great 8:16 120:19 197:23 213:21 275:23 greater 214:5 239:22 Greg 87:25 88:3,7,7 89:2,4 130:21 260:7 307:13,14,14 309:8 Greg's 307:16,18 ground	46:5 156:2 228:5 301:21 316:2 group 35:25 60:14 62:8 258:6 groups 11:9 34:15,23 grow 191:25 209:2 grows 198:16 growth 196:20,24 198:10 guess 9:23 10:10,24 11:8 17:5 30:8 31:6,6,9 34:17 40:17 42:2 45:19 49:15,23 59:7 66:4 67:8 89:15 94:5 106:5 113:2 121:24 149:5,20 150:9,10 152:15 156:3,3 159:6 173:22 188:20 189:8 207:17 219:6 229:15 239:21 249:11 257:19 259:24 290:6 298:22 303:17 304:14 307:6 308:23 guidance 42:17 guide 54:2,6,8,9,17,19,24 55:2,20 56:10 57:21 57:22 261:6,7
goal 6:19 goes 56:24 63:5 67:24 108:3 136:25 149:16 159:8 184:23 193:24 206:5 231:10 254:16 271:6 287:3 288:16,18 290:13 291:6 299:22 306:25 going 10:11 22:3 32:23,25 39:25 44:23 45:24 47:3,4 55:22 56:3 60:23,24 62:23 63:7 64:16 65:2,6,21 67:16,18 72:20			
			H
			H 320:2 half 142:14,21 197:6 237:15 245:5 246:6 246:14,20 312:14 hall

144:17 281:8,8,12 281:13,16,20 282:8 283:5 287:23 hallway 139:10 140:20 141:14 142:6,9,13 142:19 145:9,11,18 146:21 150:18,20 154:22 155:9,17 159:8,10 210:5 212:9 238:18,24 281:16,18 282:3 285:6 287:7 291:7 291:10,24 294:19 Hampshire 73:10 hand 7:7 197:12 321:20 Handbook 55:15 57:8 91:18,20 handed 306:23 handheld 244:17 245:11 handle 69:15,16 78:13 79:15 80:16 88:15 105:16 235:19 handled 42:5 45:2 80:6,19 81:24 82:2 256:24 hands 175:19 handwritten 200:2 happen 172:7 196:2 happened 107:22 114:15 172:8 174:21 176:11 177:10 178:16 181:7 224:9 280:7 288:15 happens 168:4 258:2 314:21 hard	223:8 hardwired 136:25 137:4 138:20 138:22 139:10,18 140:23 141:15,23 142:5 144:17,21 145:10,11,14 146:14 hat 230:25 haven 292:2 hazard 43:6 head 68:19 82:15 header 191:22 hear 84:10 114:11 153:13 160:5 277:4 303:24 heard 6:18 136:11 154:10 238:4 259:13,18 hearing 75:12 267:21 heat 74:16 108:8 113:4 156:19 167:15 191:18 192:8,9,16 192:23,25 193:2,3,8 193:12,16 194:3,5,6 194:7,21 195:2,10 196:4 197:16,23 209:3 213:8,11,14 213:18,19,23 214:15 215:19,20 215:23 216:14,15 216:23 223:4,5,19 225:19,20,23,25 226:9,21 230:23 231:13,23 236:8 241:4 242:3 249:21 258:24,25 259:9,10 259:13,16,19 276:7 276:18 285:18	286:7,16 290:21,22 298:15 299:19 300:21,22 301:3,5,6 301:8,9 302:5,6 303:12 313:15,24 heat-wise 310:9 heated 209:17 247:16 heater 73:14,16,24 74:8,19 81:8,24 82:12 105:7 heats 231:2 heavier 170:3 height 143:2 171:6 197:15 held 10:9 help 114:3 162:21 163:9 190:6 helped 35:6 helpful 77:9 89:9 98:16 114:13 142:3 150:9 290:17 helping 34:20,22 helps 180:7 hereinbefore 319:11 321:11 hereunto 321:19 hey 251:17 hide 309:10 high 36:10,12 134:5 248:11 276:8 279:9 higher 226:11,15 297:14	309:23 310:7 highest 36:10 highlight 243:15 highlighted 110:8 227:2 242:20 243:5,11 262:22 highly 196:21 hissing 160:5 historian 120:19 hit 107:9 183:15 248:12 hitting 168:3 169:6 248:11 hold 7:6 49:13 52:5 70:8 holder 116:8,13,15 holders 115:24 Hollowell 1:4,5 2:6,7 4:25 27:8 134:19 135:6 160:25 161:22 165:7 166:6 169:3 169:11,20,25 173:4 173:13 176:25 179:10,14 Hollowell's 171:12 267:3 294:23 HOLLOWELL-M... 1:5 2:6 4:22 home 154:23 155:18 299:17 homework 261:18 hope 161:8 273:19 hoping 209:20 232:4 280:23 280:25 282:7
---	---	--	--

284:20 317:13	84:20,22 93:6,22,25	36:24	57:8 110:13,24
horizontal	95:10 100:19 104:7	idea	111:5,14,15,22,23
206:20 207:7,8,15	113:13 136:5 142:8	78:9 121:4 264:21	112:3,10,10,18
208:13,14,17,21	145:24 146:9 147:9	293:12	113:7,11 114:6
230:14 231:14	149:9 158:6,8	identical	142:17 172:24
232:16 246:12	166:19 168:11	100:16	197:2 198:12 204:7
296:9,10 299:5,13	212:10 227:5 235:5	identification	207:11 217:25
316:25	243:24 274:14	63:11 65:10 110:12	218:3,14,18 223:14
horizontally	295:20,24 296:4,20	111:5	224:8 236:2,21,24
299:10	Hp's	identified	237:19 247:21
hot	274:19	14:9,15 65:22 307:19	250:6,12 252:18,20
46:10 171:24 191:16	Hp424	identify	252:24 253:9,19
192:13,23 193:13	175:12 178:25	88:23 104:5 239:16	254:2,7,11,22,23
206:12,16 213:16	Hp450	identifying	255:11,23,23 256:3
216:16 217:9	116:24	239:18,23 252:2	256:18 257:4 263:7
225:21 235:7,20	human	270:22	270:22,24 271:11
238:14 303:4,11	48:6,14 49:24 250:9	IEEE	271:14,14,25 272:2
hours	250:15,17,23 251:3	99:17,18	272:5,13 297:6,10
78:10,15	251:20 252:3,9	ignitable	298:8 299:25
house	humans	266:7	301:11 305:7
30:11 107:4 117:6	181:13 186:11,17	ignite	307:20 314:12
119:21 121:3,10	hundred	112:4,6 227:13 228:2	Illinois
130:10 133:25	178:19	230:16 232:13	72:16
134:2,11 136:6	husband's	236:8 240:7,16	illustration
141:7,23 145:5,8,25	269:9	241:4 244:7,23,25	191:12
146:10,23 147:11	hypotheses	247:6 249:17 279:4	image
148:13 152:21	14:5 254:21 259:3	298:17,18,19	225:14 230:22 307:7
156:25 157:6 159:5	270:4,7	307:11,22 310:17	images
163:9 181:23	hypothesis	311:6 314:7 315:14	35:15,15 181:10
189:21 198:22	15:10,11,12 59:14	317:4	199:10
200:7 216:21	198:18 217:20	ignited	immediately
233:16 257:20	252:12,12,13 255:7	111:24 113:12	147:5 157:25 183:24
260:12 263:25	268:19 270:8	158:16 219:11,19	282:8 283:7
267:12,23 268:22	271:10,13 275:7	227:24 229:12,17	impacts
273:7,8,9 301:24	318:6	230:6 235:8 236:18	299:18
302:2,3	hypothesize	238:15 239:3,16	import
housekeeping	114:15	241:16,19 244:8,11	78:3
5:9	hypothesized	253:16 271:12	important
houses	193:20 196:2	288:23 301:9 302:5	7:19 58:6 125:20
107:23	hypothesizes	304:17 305:21	126:8 143:20,21,23
hovering	194:12	310:12 314:15	144:9,12 154:9,13
157:12,21	hypothetical	315:7	181:14 186:10,16
Hp	203:2	igniting	309:6
1:10 2:11 4:17 10:23		111:15 114:24 244:4	impossible
11:21,22 13:8,12,18	I	ignition	101:16 183:8 276:18
13:19,22 42:2 84:17	IAAI	12:11 41:8 55:15	impression

93:8 94:20 improper 106:24 107:13,14 108:9 109:4,11 improperly 42:25 48:18 50:20 250:19 improve 295:14 in-house 67:14 100:13 inaccurate 77:23 inappropriate 27:4 42:16 271:8 inappropriately 270:21 incendiary 256:25 265:22,23,24 265:25 266:4,10,16 269:22 incense 256:24 inch 129:17 312:13,14 inches 171:7 312:9 incident 33:18,21 incipient 194:3 215:18,24 226:18 292:11 include 41:6 60:18 235:6 250:6 273:15 included 149:15 254:12 256:11,15 including 36:7 235:9,16 241:15 275:14 inclusive 35:25 inconsistency 29:17 30:6,8 31:4,10 31:20 32:10,17	178:6 inconsistent 28:25 181:4 214:4 incorrect 27:10 57:4,7,8 58:5 58:6 77:24 183:21 199:17 251:13 271:10 increase 302:15 increased 294:24 295:11 incur 66:8,14 indicate 182:8 203:7 indicated 83:7 indicates 212:10 indicating 124:21 200:17 211:8 indication 15:15 29:20 180:10 indicators 295:22 individual 121:25 122:10 191:8 individually 1:3 2:5 308:3 individuals 62:2 indoor 45:8,9 46:16 47:16 indoors 45:16 industry 57:23 99:10,25 100:15 112:19 273:16 infer 146:18 253:19,22 inferences 271:16 inform 30:18 255:16	information 19:25 60:18 111:7 115:15 131:9 135:2 143:12 256:12 275:5 276:2 280:5,9 293:18 305:11 320:18,19 informations 291:17 inhabitants 198:22 200:7 initial 17:19 18:2,18 19:6 25:14 26:4 87:22 263:8 272:24 276:3 280:9,10 293:15 initially 87:13 initiation 213:25 292:10 inject 235:23 injected 235:21 237:12 238:2 244:6 247:4 injecting 244:5 injection 235:7 injects 236:22 injury 69:20,22 input 58:3 61:16 62:2,3,6 inputs 60:12,16 61:21,22 62:13 inquiries 20:20 inquiry 56:4 inside 44:18 45:8,20,22 46:10 209:12 212:16,20 279:4	inspect 183:17 215:7 229:7 inspected 262:10 inspecting 97:9 inspection 14:20 17:19,21,22 88:6 93:12 94:3,3 187:17 189:6 225:12 239:14 268:20 293:16 308:20 inspections 102:9 installed 94:18 121:20 130:4 131:25 132:13 installing 122:3 125:15 instance 117:11 instances 16:6,9,15 20:2 44:25 76:7 instant 152:18 instructions 77:17 insulation 278:8 insurance 17:18 38:18 273:5,11 273:16 insured 21:6 117:9 intact 133:19 228:17 intended 124:23 125:18 143:25 intense 165:21 169:9 intensity 191:25 214:5 intent
--	---	--	---

228:19	103:7,13 104:24	41:12 42:6 73:4,7,9	33:1 34:1 35:1 36:1
intentionally	105:20 106:17	74:6 80:11,12,15,17	37:1 38:1 39:1 40:1
71:19 266:8 268:6	111:18 129:4 131:5	80:19 97:12 103:18	41:1 42:1 43:1 44:1
interest	133:2 143:22 154:5	106:3 218:20 303:6	45:1 46:1 47:1 48:1
265:17 269:16	184:22 220:5 234:2	ISO	49:1 50:1 51:1 52:1
interested	234:6 239:17 252:6	35:2	53:1 54:1 55:1 56:1
321:17	263:8 269:19	isolated	57:1 58:1 59:1 60:1
interesting	302:13,15 314:11	214:4	61:1 62:1 63:1 64:1
42:13	318:2	issue	65:1 66:1 67:1 68:1
interior	investigations	43:12 46:20 47:7	69:1 70:1 71:1 72:1
88:11,12 158:12	53:23	61:6 84:17 106:23	73:1 74:1 75:1 76:1
265:3 285:7	investigator	106:24 131:8,23	77:1 78:1 79:1 80:1
internal	36:24,25 87:17,18	187:22 193:22	81:1 82:1 83:1 84:1
39:4	96:5 182:17,23	194:2 195:6 221:14	85:1 86:1 87:1 88:1
interpretation	199:12,20 211:3	234:10 249:19	89:1 90:1 91:1 92:1
125:19 178:14	220:25 223:22	275:18 278:16	93:1 94:1 95:1 96:1
interrogatory	296:16	284:20 286:24	97:1 98:1 99:1
27:6 126:23 184:15	investigator's	issues	100:1 101:1 102:1
interrupt	11:16	19:14 26:15,18 32:5	103:1 104:1 105:1
7:14	investigators	32:8 45:4,7 48:9	106:1 107:1 108:1
interview	12:8 25:2 26:2 27:25	52:24 59:24 61:4	109:1 110:1 111:1
19:20,21 20:6,19	37:3 53:20 56:16	76:11,15,17 181:3	112:1 113:1 114:1
21:21 22:4,11 26:10	116:19,23 220:22	189:5 234:20,21	115:1 116:1 117:1
133:7,10	228:16 271:3	298:12	118:1 119:1 120:1
interviewed	invoiced	item	121:1 122:1 123:1
20:10 24:19 187:3	66:13	14:20 92:15 113:11	124:1 125:1 126:1
interviewing	involve	231:14 300:17	127:1 128:1 129:1
20:25	21:10 71:7,19,20	304:21 306:15	130:1 131:1 132:1
interviews	72:25 73:2,20 80:8	313:12	133:1 134:1 135:1
21:14 32:23,25 133:3	80:12	items	136:1 137:1 138:1
133:4 263:21	involved	14:18 18:12,15 20:5	139:1 140:1 141:1
intrigued	37:14 71:8,10,18	43:9 50:17 106:13	142:1 143:1 144:1
264:20	73:11 80:15 81:6	207:6,7 208:12	145:1 146:1 147:1
investigate	90:10 167:24 264:3	235:24 240:6	148:1 149:1 150:1
128:22 250:24,25	283:20 291:25	262:23 299:10	151:1 152:1 153:1
252:5 264:25 265:5	involvement	300:2	154:1 155:1 156:1
investigated	167:5 226:19,23		157:1 158:1 159:1
28:20 154:2	245:4,7,11 246:22		160:1 161:1 162:1
investigating	277:25 283:3,15		163:1 164:1 165:1
55:11	288:4 290:14,25		166:1 167:1 168:1
investigation	291:2,9 294:20		169:1 170:1 171:1
11:18 15:5,6 32:14	involves		172:1 173:1 174:1
39:2,5,7 48:22	20:22 21:15 50:2		175:1 176:1 177:1
50:14 52:6,23 54:3	involving		178:1 179:1 180:1
54:22,24 55:8 56:11	254:21		181:1 182:1 183:1
57:2 79:22 90:12	ion		184:1 185:1 186:1

J

J

4:1,2 5:1 6:1 7:1 8:1
9:1 10:1 11:1 12:1
13:1 14:1 15:1 16:1
17:1 18:1 19:1 20:1
21:1 22:1 23:1 24:1
25:1 26:1 27:1 28:1
29:1 30:1 31:1 32:1

187:1 188:1 189:1	39:19 291:15	1:19 4:1,11,15 5:1	153:1 154:1 155:1
190:1 191:1 192:1	Jaclyn	6:1 7:1 8:1 9:1 10:1	156:1 157:1 158:1
193:1 194:1 195:1	2:15	11:1 12:1 13:1 14:1	159:1 160:1,22
196:1 197:1 198:1	Jacqueline	15:1 16:1 17:1 18:1	161:1,24 162:1
199:1 200:1 201:1	297:21	19:1 20:1 21:1 22:1	163:1 164:1 165:1
202:1 203:1 204:1	Jacqueline's	23:1 24:1 25:1 26:1	166:1 167:1 168:1
205:1 206:1 207:1	273:9	27:1 28:1 29:1 30:1	168:13 169:1,8
208:1 209:1 210:1	jail	31:1 32:1 33:1,5	170:1 171:1 172:1
211:1 212:1 213:1	269:3	34:1 35:1 36:1 37:1	173:1,19 174:1
214:1 215:1 216:1	January	38:1 39:1,16 40:1,3	175:1 176:1 177:1
217:1 218:1 219:1	4:23 5:6 46:4 148:11	41:1 42:1 43:1 44:1	177:21 178:1 179:1
220:1 221:1 222:1	182:2,7 289:18	45:1 46:1 47:1 48:1	180:1 181:1 182:1
223:1 224:1 225:1	Jason	49:1 50:1 51:1 52:1	182:14,15 183:1
226:1 227:1 228:1	1:19 4:11 27:13	53:1 54:1 55:1 56:1	184:1 185:1 186:1
229:1 230:1 231:1	319:15	57:1 58:1 59:1 60:1	187:1 188:1 189:1
232:1 233:1 234:1	Jeff	61:1 62:1 63:1,14	190:1,6 191:1 192:1
235:1 236:1 237:1	11:17 87:16	64:1 65:1 66:1 67:1	193:1 194:1 195:1
238:1 239:1 240:1	jelly	67:21 68:1 69:1,2	196:1 197:1 198:1
241:1 242:1 243:1	237:5,7,22 247:5,22	70:1 71:1 72:1 73:1	199:1,8 200:1 201:1
244:1 245:1 246:1	248:7,18 249:3,8	74:1 75:1 76:1 77:1	202:1 203:1 204:1
247:1 248:1 249:1	255:13 272:5 304:7	77:10 78:1 79:1	205:1 206:1 207:1
250:1 251:1 252:1	305:17	80:1 81:1 82:1 83:1	208:1 209:1 210:1
253:1 254:1 255:1	Jersey	83:5 84:1 85:1 86:1	211:1 212:1 213:1,6
256:1 257:1 258:1	38:18	87:1 88:1 89:1,11	214:1,7 215:1 216:1
259:1 260:1 261:1	Jessica	90:1 91:1 92:1 93:1	217:1 218:1 219:1
262:1 263:1 264:1	1:4 2:6 4:22	94:1 95:1 96:1 97:1	220:1,3 221:1 222:1
265:1 266:1 267:1	job	98:1 99:1 100:1	223:1 224:1 225:1
268:1 269:1 270:1	8:16 35:4 38:18,20	101:1 102:1 103:1	226:1 227:1 228:1
271:1 272:1 273:1	joined	104:1 105:1 106:1	229:1 230:1 231:1
274:1 275:1 276:1	39:18	107:1 108:1 109:1	232:1,24 233:1
277:1 278:1 279:1	joint	110:1 111:1 112:1	234:1 235:1 236:1
280:1 281:1 282:1	11:13 34:4,8 35:19	113:1 114:1 115:1	237:1 238:1 239:1
283:1 284:1 285:1	87:14	116:1 117:1,2 118:1	240:1 241:1 242:1,6
286:1 287:1 288:1	Judge	119:1,6 120:1 121:1	243:1,7 244:1 245:1
289:1 290:1 291:1	3:13	122:1 123:1,25	246:1 247:1 248:1
292:1 293:1 294:1	July	124:1 125:1 126:1	249:1 250:1 251:1
295:1 296:1 297:1	17:12,12 128:15	127:1,12,17 128:1	252:1 253:1 254:1
298:1 299:1 300:1	jump	129:1 130:1 131:1	255:1 256:1 257:1
301:1 302:1 303:1	72:5	132:1 133:1 134:1	258:1 259:1 260:1
304:1 305:1 306:1	Jury	135:1,16 136:1	261:1 262:1,16
307:1 308:1 309:1	71:16 75:12	137:1,14,23 138:1	263:1 264:1 265:1
310:1 311:1 312:1		139:1 140:1,10	266:1 267:1 268:1
313:1 314:1 315:1	K	141:1,6 142:1 143:1	269:1 270:1 271:1
316:1 317:1 318:1	K	144:1 145:1 146:1	272:1 273:1 274:1
319:1 320:1 321:1	4:2,2	147:1,7 148:1 149:1	274:15 275:1 276:1
Jackie	Karasinski	150:1 151:1 152:1	277:1 278:1 279:1

280:1 281:1 282:1 283:1 284:1 285:1 286:1 287:1 288:1 289:1 290:1 291:1 291:12 292:1 293:1 294:1 295:1 296:1 297:1 298:1 299:1 300:1 301:1 302:1 303:1 304:1 305:1 306:1 307:1 308:1 308:24 309:1,14 310:1 311:1 312:1 313:1 314:1 315:1 316:1 317:1,18 318:1 319:1,15 320:1 321:1 keep 205:18 316:9,9,10 Kentucky 72:10 key 213:8 keyboard 225:16 296:8,10 Keyence 90:9,14,15 kicking 74:19 kids' 31:14 121:4 killed 107:23 kind 70:7 102:23 114:9,14 147:15 148:6 156:4 156:24 184:23 214:24 215:7 241:8 276:11 315:5 kinds 44:17 236:14 303:2 KINGS 321:5 Kirk's 54:22 55:7,14 56:9 56:12 57:7,17 58:20 59:2	kitchen 155:10 185:25 186:4 199:8 201:22 204:16 281:5,6,23 283:24 287:22 290:2,3 knew 31:24 98:19,19 132:9 280:22,24 311:24 311:24 knock 273:23,25 knocked 264:6 knockoff 92:18 know 5:19 6:6 7:9,16 8:10 14:19,21 15:18 22:9 24:3,10 26:14,19 30:20 31:5 32:22 34:6 38:14 39:15 43:8,10 44:21 45:3 45:22,25 47:5,6,7 47:11 49:25 50:16 50:24 51:3 55:17,18 55:21 56:20 57:19 58:25,25 59:3,16,16 60:25 62:19,24 66:4 66:15 68:11,18 69:5 71:11 72:2,9,24 77:9,23 78:7,10 80:3 82:6 84:3,20 85:9,16,16 86:22 87:10 89:23 90:9 94:12,18,23 95:23 95:25 96:11 97:3,6 97:11,16 98:11 99:2 99:4,10,18 100:6,7 101:20 104:15,19 106:13 107:2 108:11 111:11 112:16 113:17 119:16,22 120:22 120:25 121:20 122:23 124:18,20	125:21 126:11 127:13 131:17 134:6,22 137:25 139:6 141:22 144:9 146:3 148:16,25 150:24 151:4,12 152:12 153:11,11 153:22 156:5 159:13 173:17 174:7,11,25 175:22 175:23,24 176:6,11 176:13,13 177:10 177:14 179:15 180:7,25 181:6 184:6,12 186:24 187:17 192:6 197:9 200:9,23,24 201:4 201:15 204:15 205:22,24 217:5,18 221:4 222:19,20,22 223:2 225:7 226:14 231:2,9 233:24 234:5,23 235:15 237:15 238:9 240:8 240:9,12 241:6 243:10 245:18,19 245:21 246:13,19 249:3 253:11 256:8 257:16 263:17 264:22 266:2 273:6 273:12,22 276:13 277:8 280:3,11 286:11,20 289:3 292:20 293:9,11,11 294:17 296:14,16 296:19 303:2,3 305:17,21 306:18 306:22 312:16 316:7 knowing 153:4 155:19 knowledge 95:7,11 248:4 known 112:18 254:24 255:11 270:24	knows 33:17,20 314:21 <hr/> L <hr/> L 3:2,2 319:2 lab 10:24 11:5 14:21 25:20 34:4,25 35:19 66:24,25 67:2 89:6 89:24 91:12 93:12 93:15 94:3,24 96:10 102:18 120:13 132:10 305:5 306:23 312:7,20 Laboratories 96:16 laboratory 26:5 34:8,20 93:4,18 275:15 labs 39:11 lack 271:25 lady 269:8 laid 34:16 Lambuth 36:15 38:5 land 187:25 188:3 190:8 landed 228:8 232:7 239:3 244:7 310:15 311:16 317:2 landing 114:23 lands 55:23 316:2 lane 69:7 103:21 Lange 2:4 22:15 79:12,24 80:24 81:13,15,19 laptop
--	--	--	--

12:12 13:22 17:21 49:8,9 90:11 91:12 94:24 95:2,24 102:24 108:25 109:19 126:2 129:2 129:18 136:5 142:8 145:24 146:9 147:9 149:9 166:19 184:11,14 185:7 196:10,12 197:17 197:24 212:10 213:3,17 214:4,9,10 214:22,25 215:8,17 216:2,4,13 217:2 219:25 220:3 225:24 226:2,5,6,13 227:5,12 229:21 232:7 235:5 241:22 241:23 250:19,20 250:21 251:5 259:5 282:10 283:7 286:24 290:10,11 292:12 295:21 296:2,6,7,20 302:20 307:2 316:4 laptop's 225:22 laptops 13:11,15,16,20 101:18 large 38:24 113:19 237:22 244:21 312:16 larger 137:17 173:14 law 12:3 38:24 246:2 lawnmower 82:3,12 lawsuit 4:21 5:4 37:15 lawsuits 37:21 lay 89:2 layer	143:4 147:22 149:19 150:6 156:19 167:25 168:2 169:6 169:9 170:23 171:8 171:10,15,20 172:6 172:13,15,25 191:16 192:8,14,23 193:13 194:3,5,22 195:2 196:4 197:21 206:12,16 209:17 213:11,14,16,18,23 215:19,23 216:23 217:9 225:23 226:2 226:9,21,22 276:18 300:16,22 301:3,9 302:6 layer's 159:3 166:24 192:10 laying 101:20 179:22,23 228:5,21 229:2 299:10 layman 122:4 layman's 230:23 layout 106:10 learned 234:4 learning 184:17 leave 70:18 165:7 190:25 204:4 267:12 leaves 166:22 leaving 157:23 195:8 left 12:13 38:14,22 39:5 46:24 89:5 162:8 163:21 164:11,15 169:3 170:5 173:5 176:7,16,20 178:3 181:7 199:10	203:11,25 205:14 205:22 206:6 211:20 217:9 229:25 242:6,7 248:14 281:10,13 281:17 282:2 285:10 299:6 313:11 lend 255:22 length 257:13 let's 56:7 74:2 100:21 113:11 136:15 150:13 151:3 159:6 171:18 180:3 214:16 242:19 253:15 273:7 284:3 284:4 289:8 letter 57:17 letting 7:8 level 36:11 157:15,24 159:6,11 172:6,17 172:18 197:14 213:12,15,17 238:22 239:22 300:17 301:25 303:17 Levites 2:13 4:8,16 5:8,12,21 5:24 39:17 68:15 77:3,6 190:2,3 320:16 liability 273:13 Liberty 38:20,21,23,25 39:3 76:8 license 276:12 licenses 36:21 37:4	life 152:5 297:22 lifted 51:7 lifting 268:21 light 117:10 151:20 158:20 207:19,22 208:2,24 244:18 285:14 287:7 298:13 lighter 225:21 264:19 lightning 256:23 lights 152:19 liked 22:18 likeliest 164:14 likelihood 302:16 limit 279:9 limitation 247:24 limitations 149:5 247:20,25 Linden 91:19 Linden's 91:17,20 line 119:7,9 160:24 161:21 190:8 226:15 280:20,21 300:24 320:24 linens 247:8 lines 63:24 136:16 137:22 138:6,10,14 140:9 187:25 188:3 liquid
---	---	--	---

266:6	156:2 262:25	158:21 166:17	131:12 147:2
liquids	263:23 277:2 281:6	167:9,20 232:3	161:19 178:9,25
266:7	290:3 302:6	238:12 243:23	188:22 192:18
list	LLP	244:10 310:24	206:8 211:19 212:8
68:24 69:4 70:5	2:4	longer	215:8 225:16
71:20 72:6 80:22	load	135:10 150:19	226:21,25 229:3,11
81:4 255:21 256:5,6	16:10	196:15 249:21	232:20 234:13
256:22 259:3 263:2	local	313:24	242:19 248:24
listed	8:6 9:18 10:20 11:3	longest	249:25 262:15
51:24 55:19 76:23	11:10,12 12:3,3	142:14	266:11 281:24
85:25 96:12 97:2	24:25 25:17,25	look	294:13 297:17
137:22 240:17	26:11 27:25 87:17	14:18 40:19 45:7,15	308:25 313:13
listing	96:4 116:19,23	48:20 51:10,23	316:10,18
96:15	135:3 185:17 186:6	63:16,19 68:12,16	looks
lists	199:12 220:22	68:17 72:15,19,23	117:20 174:11,14
256:17	223:21 234:25	96:14 98:5 102:4	175:13,24 176:4
lit	246:2	103:18 104:8 105:3	177:25 200:12,17
119:2 264:13 269:8	local's	105:9 117:18	200:21 201:20
lithium	200:4	120:16 127:13	231:12 237:8,14
41:12 42:6 73:4,7,8	locals	131:7 169:13,16	255:20 301:19
74:6 80:11,12,15,17	19:23 185:14,19	173:20,24 174:5	312:10
80:19 97:12 103:18	locate	176:2,15 177:8,17	loosely
106:3 218:20 303:6	129:24 130:18,20	178:9 185:2,4	99:25 100:14
litigation	218:11	188:17 189:12	lose
307:23	located	193:24 198:13	236:9
little	165:13 183:18	201:17 202:18	loss
23:23 30:9 31:10	185:24 235:8	210:15 214:10,17	10:18 67:10 105:20
39:22 40:18 64:17	location	230:5 238:17	132:8
70:8 135:12 138:13	119:20 120:12 167:2	257:24 266:15	losses
161:12 191:21	187:15 189:5	280:15 299:8 300:5	80:19
198:5 200:22 231:2	217:24 295:20	309:7	lost
243:14 246:16	301:22	looked	160:4
247:2 293:22 294:7	locations	60:17 81:3 131:17	lot
294:11,14 296:18	181:14 196:16	134:24 175:23	6:7 10:11 12:22 34:5
297:4 302:8,9	258:11 311:4	176:6,14 182:8	42:18 43:3 55:14
313:14	lodged	210:6,12 211:23	60:11,12,15,18,20
Litzynger	249:3	255:2,19 262:8,17	77:11 79:12 80:18
10:7,16 11:22 29:15	logical	262:19 268:14	87:11 101:21
33:22 35:21 36:2	271:16	270:4,5 277:11	117:22 230:20
52:16 219:22	long	279:13 310:14,25	251:12,14,15 273:4
220:17 223:18	17:22 22:2 80:3	311:10 315:18	302:22
264:5	85:17 136:3 142:6	316:15	lotion
live	144:9,25 145:4,22	looking	230:25
149:12,13	146:8 147:7 148:12	50:2 51:3,4,5 69:4	lots
living	152:25 155:11	71:24 104:25	63:6
11:19 121:8 155:10	157:14 158:4,13,17	105:11 110:7 127:4	loud

159:13,15,16,19,20 160:3,6 louder 160:14 louver 211:16,20 265:2 280:13 low 169:9 170:23 225:23 225:25 lower 172:16 196:4 301:11 lowest 172:17 Luckey 11:17 87:17 lunch 135:12 lying 161:2,23 230:24	98:6 102:22 104:4 106:11 manipulated 258:13 manipulating 90:7 manner 87:12 manufacture 143:12 184:6 manufactured 85:10,21 92:14 123:10 manufacturer 52:25 92:14 101:9 105:22 147:18,19 233:8 275:10 manufacturers 70:3 101:5 manufacturing 40:4,16,24 41:16,19 42:8 60:21 61:3 mapping 62:10 Marcellin 1:3 2:5 4:22,24 17:11 19:7,20 22:13,19 23:25 26:15 27:10 29:18 32:19 85:5,8 85:14 93:5,20 95:19 96:25 100:20 102:15 103:10,24 108:21 115:16 118:11,19 119:14 120:3 121:12 123:3 123:9,16,19 124:3 130:3,8 131:21 132:15 134:15 135:19 139:23 141:15 142:17 144:18 147:4,10 148:10 162:21 164:2 165:6 169:3 170:24 175:7 178:22 181:19 182:17 184:7,12	187:12 198:7 217:7 217:9 225:17 243:16,17,20 244:15 276:21 279:12 280:21 284:24 289:10 318:2 Marcellin's 5:4 29:5 94:8 129:17 132:18 137:9,12 162:3 174:19 179:7 185:10 188:23 194:13 195:13 216:7 217:13 260:22 268:15 293:21 March 1:14 126:25 127:11 Marcillin 20:19 24:19 25:5 85:3 103:2 108:17 131:16 275:25 Marcillin's 18:6 Marine 60:10 Marion 36:13 mark 65:6 165:24 166:4,5 166:19 167:11 168:12,15,20 169:13,13,22 170:25 171:12 181:4 267:4 marked 63:10,25 65:3,9 66:3 82:17,18 86:9 135:15 226:9 274:4 320:23 marketing 36:20 marking 229:23 marks 168:24	marriage 321:16 marshal 12:4 Marshal's 8:6 9:18 marshals 10:21 185:17 186:6 Martin 92:4,6 93:2 95:18 97:14,22,24 98:15 99:2,15,22 102:9,12 103:5 105:15,25 108:13,22 109:8,9 109:19 125:25 128:17 129:8 160:9 185:7 193:19 194:12 196:2 228:19 229:9 235:18 251:9 268:20 302:10 305:5 306:12 312:6 312:24 313:7 Martin's 123:6 184:10 251:7 mask 148:21 masking 87:3 mass 249:15,16,19,22 312:2 313:10,14,20 313:22 Massachusetts 2:12 masses 317:9 master 140:22 156:22 match 100:16 133:21 material 114:20 158:12 172:23 206:24 207:3 218:12 235:7 235:21,21 236:5,9
<hr/> M <hr/>			
magazine 168:6 208:21,22 299:15 magazines 208:16 297:23,24 298:2 Main 2:8 maintain 249:20 313:24 maintenance 108:9 121:13 122:8 major 47:18 making 43:18,20 47:14 57:19 59:19 61:19 122:12 179:4 236:10,11 318:14,15 malfunctioned 281:2 man 151:4 management			

236:15 238:15 239:2 240:2,17 247:18 254:3,13 255:13 288:23 290:9 300:21 301:10,15,20 307:10,20 309:23 310:3,3,12 311:5,18 311:19 312:17 314:9,22 316:20 317:6,8,9 materials 66:24 85:24 206:18 206:21,25 207:8 227:24 232:18 236:22 239:19 240:4,8 241:2 247:7 247:12 249:18 256:24 310:25 311:5 313:16 314:6 314:7,15 315:6,9,12 316:11 Matt 79:19 matter 64:3 79:22 103:3 321:18 Matterport 88:3,4,8 130:22 131:2 202:20 matters 70:6,23 75:15 McKay-Hollowell 27:9 mean 22:6 24:3 25:16 28:10 32:7 33:19 34:17 35:11 40:7 43:3 47:3 56:21 66:5,17,18 69:7 71:22 80:4,16 89:15 89:20 90:2 94:12,17 95:22 101:16 106:6 106:7 108:5 116:10 116:15 117:25 118:15 120:22,24	121:2 125:2,24 126:4,4 133:15 134:4,7 142:11 146:7 153:12 163:9 164:7,11 170:15 172:14 173:5,7,22 174:2,10 175:16,23 183:18 190:4 192:15 197:9 206:7 214:7 233:11,12,16 236:2 247:23 248:4 253:2 264:4,18 265:4 269:13 270:18 273:3 280:13 283:16 288:2 293:24 296:15 297:18 302:24 303:10 304:22 307:25 314:17,20,25 meaning 27:24 32:18 37:15,16 85:15 94:13 124:23 224:25 239:23 240:19 247:22 281:8 meaningful 68:19 means 124:15 258:13 meant 94:16 161:7 measure 312:2 measurements 98:4 mechanical 53:3,5,6,7 209:13 278:23 303:8 305:23 mechanism 193:12 mediations 37:22 medication 12:15 113:9	meet 9:22 meeting 57:25 63:5 318:14 meets 96:17 98:8,10 115:7 melt 82:10 213:13,21 melted 213:2 214:11,13 216:25 227:16 melting 196:5 213:7 225:15 226:5,7,12 227:16 241:21 266:23 292:15 301:20 309:22 310:6 member 53:10,12,14,15,17 60:13 members 243:12 memorialized 25:6 memorization 38:8 memorized 38:9 memory 26:16,17 31:25 32:6 32:8 72:21 mentioned 44:6 46:23 51:22 64:20 71:17 126:16 168:10 173:3 189:15 209:4 249:2 252:15 258:3,5 mentioning 228:10 merely 177:24 messy 174:13 met 4:15 10:3 meter	90:4,16 91:6 methane 258:7 method 14:3 15:8 20:15,17 25:23 32:22 59:13 111:10 132:22 218:8 252:7 255:6 255:10 258:23 271:8 Miami 113:18 microscopy 90:15,18 91:7 middle 46:3 87:2 113:20 287:8 300:6 military 37:12 mind 18:5,17 72:6 92:22 92:24 230:23 234:6 mine 182:12 257:22 274:9 minor 36:20 220:16 minus 46:6 minute 137:11 142:13,14,21 152:23 158:23 197:6 minutes 82:25 142:16,21,24 144:16 149:8 150:12,14,15 152:24 158:25 197:7 226:22 245:5 245:13,16 246:7,14 246:20 291:8 295:4 295:5 Miriam 1:22 321:7,23 mishandled 106:15 misinterpret
---	---	---	--

119:24 misinterpreted 120:4 missed 68:15 253:6 misspoke 176:12 mistaken 140:15 141:16,25 202:6,6 281:19 283:11,13 288:25 misuse 107:7,12 108:8 misused 48:22 106:15 251:4 mix 241:8,9 model 84:19 85:2 100:6 modeling 147:21 modification 121:22 122:2 modifications 121:14 moment 127:12 174:24 182:22 Monday 68:10 151:7 monitor 295:25 296:4,13,20 month 38:14 months 26:3 morning 12:25 39:25 135:20 181:25,25 182:6 205:6 253:4 267:15 289:12 Morrisville 36:14 motive 193:8,14 motives	193:2 mourning 206:4 move 23:23 47:8,9 169:23 moved 32:14 175:20 239:13 movement 207:19 movements 181:15 moving 47:14 59:3 67:15 multiple 37:3 41:22 42:9 43:13 44:7,25 54:12 55:16 70:3 82:2 106:21,22 107:14 196:16 223:9 235:23 236:3,14 238:25 mute 317:15 Mutual 38:20,21,23,25 39:4 <hr/> N N 2:2 3:2 4:2,2 319:2 320:13 NAFI 36:25 53:17,19 nail 315:5 name 4:9,16 11:17 73:13 87:20,20 named 239:4 National 37:2 53:19 245:25 nature 66:16,19 91:14 96:19 148:23 152:9 217:2 302:12 305:2 308:11	near 15:21 nearby 310:18 311:6 necessarily 49:25 124:4 146:22 necessary 224:8 259:22,23,25 277:7 293:18 need 7:3,4 17:5 38:13 51:2 55:23 59:14 61:3 72:6 112:2 139:15 147:16,17 233:2 250:23 253:21 260:4,17 264:22 300:16 needed 26:19 27:18 51:16 275:4 276:12 needs 51:12 58:4 60:11 163:9 286:20 NEFCO 12:2,8 17:20 87:19 211:3 228:15 296:16 negative 270:17,19 271:4,6,19 271:23 272:7,9 309:16 neighbor's 152:16 neighboring 273:11,14 neither 138:20 190:20 never 14:19 22:11 25:11 26:6 29:20 31:13 46:17 57:12,15 95:19 97:8 116:8 118:17 121:12 122:19 152:4 233:19 309:17,18 309:19,20	new 1:2,23 2:8 4:5,14 35:20 38:18 39:14 41:23 46:2 72:12 73:10 87:6 89:7 96:7 100:22 125:7 125:15 206:5 287:9 321:4,8 news 80:17 NFPA 53:10,12,13,14,25 54:5 55:15,16,19 57:3 58:19,25 61:22 62:17 110:9 115:6 206:9 270:12,15 316:12,14 nice 318:13,15 night 203:13,23 204:24,24 205:4,4,8 303:15 Non-OEM 92:9,11,18,19 93:16 Non-Party 1:19 nondestructive 90:7 nonexclusive 255:21 nooks 151:25 normal 6:24 122:7 153:7 203:17 280:7 normally 7:2 20:24 21:14 northerly 5:20 nose 151:5 231:8 notable 166:9 168:24 Notary 1:22 4:4 319:22 321:7
---	---	--	---

note 5:25 129:17 130:3 135:18 236:10,11 236:13 275:8 notebook 16:11 17:8 41:3,16 52:21 72:25 73:3 80:9 84:17 85:4,5,9 85:11,14,15 93:20 94:8 97:2 99:12 102:16 103:3,11,25 104:21 108:15,19 109:5 113:13 123:10,14,16,20 124:5,11,13 130:11 130:12 131:23 142:18 225:14 269:17 318:2 noted 123:19 notes 7:25 8:9 29:8 85:19 275:16 297:5,7 299:9,24 notice 87:23 204:17,18 notified 153:24 noting 39:17 161:11 notwithstanding 216:5 number 219:22,24 220:20 221:3,4 222:10,12 222:14,18,19,20,23 222:25 224:10,17 224:18,19,20 225:3 233:23 234:16 320:7 <hr/> O <hr/> O 3:2 4:2 319:2 o'clock 205:10 253:3	oath 3:12 5:14 object 26:22 231:20,21 299:19 objected 145:3,6,8,22 146:3 objection 27:20 56:5 146:6 262:3 objections 3:21 observations 217:14 218:10 observe 220:7 286:6,15 312:19 observed 28:7,23 117:7,14 183:13 213:2 214:3 218:4 219:8,22 224:11 290:21 294:5 309:9 311:23 observing 158:4 obtain 102:5 obtained 36:16 38:17 47:23 48:2,3 obvious 258:20 298:24 obviously 10:22 17:17 35:16 43:6 44:18 47:8,9 62:17 71:24 100:24 170:16 172:3 305:5 occupant 11:19 143:25 occupants 144:14 153:24 186:20,22,25 187:5 234:19 269:21 occurred 72:14 93:13 213:24 214:9,13 215:13	277:6,25 occurrence 133:6 occurring 110:22 113:6 172:20 196:10 287:2 occurs 86:22 292:14 October 19:9 63:9 64:13 65:3 68:3,20 77:16 93:4 93:18 OEM 92:12 93:9 104:6 off-the-record 10:8 offenders 269:5 offered 50:4 276:25 offering 49:10 256:4 offhand 49:4 office 76:9 79:8 88:19,20 112:23 129:18 130:10 136:11,13 137:6 138:24 139:3 141:3 150:13,17 154:16,17 155:7,16 157:11,13,22,24,25 188:6,13 209:24 212:9 218:25 225:4 257:23 260:3,7,9,16 261:12 263:22 264:13 277:18 279:20 281:13 285:2,3 286:9 287:25 292:4,4 311:3 Ogden 98:22 Oh 58:14 63:21 64:19 72:20 75:24 78:9,16	81:23 123:22 166:14 186:19 210:10 249:10 303:5 313:2 OJ 251:17 okay 5:13,23 6:2,14,17,22 7:10,17 8:5 9:4,9 12:14 13:12 16:8 21:22 22:25 24:24 25:10 27:23 28:9 30:15 32:13 33:16 34:7 35:5,21 36:8 42:7 46:21 47:23 49:2,10,13 50:10 51:5 52:20 54:18 55:25 57:13 58:16 58:23 59:6 61:18 62:15 63:25 64:11 64:22 65:4,12,23,24 67:16,23 68:9,23 69:12,14 70:24 73:17 74:25 75:14 75:21 77:6 78:21 82:5,11 83:11,24 84:21 85:6,7,18 86:2 90:16 91:6 92:3,16 94:16 98:16 99:20 106:8 109:22 111:4,21 112:7 113:9 114:8,9 115:9 115:13 116:21 117:15 118:9 123:5 123:23 125:7 128:14 129:3,9,15 134:14 135:14 137:20 138:4,5,17 139:2,15,22 140:17 141:13 146:17,25 148:19 151:2 153:6 153:17 154:6,15 155:11 156:23 159:13 160:18 162:2 163:3,15 164:13 165:16
--	--	--	---

166:3 168:9 169:2 169:19,24 171:15 171:20 173:2,9,13 173:19 174:18 175:3,4,10 177:4,23 180:2,18 181:8,12 183:11,21 184:23 189:12,17 190:5,10 190:16,18 193:17 195:12 205:20,21 208:7 210:14 211:15 214:12 225:13 226:17 230:24 242:12,20 243:19 254:15,15 263:16 267:18 275:23 280:19 281:11,22 282:13 289:20 295:17,18 302:14 303:11 308:16 316:16 old 100:8,23 185:5 once 61:24 88:7,12,17 156:21 167:5 168:4 174:3 200:3 225:23 232:17 263:11 276:22 one's 299:13 ones 80:22 96:23 160:14 206:22 222:6 online 101:23 126:10 Onondaga 72:17 OnStar 187:13,21 189:8,9,11 open 131:6 152:5 155:21 156:12,15 192:7 207:19,22 208:23 212:3 213:5,8 244:23 245:2	246:18 266:13 273:13 280:13 296:18 298:4 310:18 311:7 opened 39:8 124:15 151:7,10 156:21 204:4 209:22 265:7 289:24 opening 125:17 142:12 150:3 150:4,7 154:18,20 155:15 159:5 192:4 245:18 operate 144:20 operated 140:14 operates 14:25 operating 139:8 156:6,8 operation 14:14 15:3 opine 114:6 276:11 290:16 310:2 opined 276:25 310:11 opinion 25:22 50:5 73:23 93:14 103:9,12 110:12 111:20 115:4 117:4 118:20 121:17 175:12 177:20 179:25 180:2,4 182:12,16 213:7 219:9 229:12 239:5 240:14 247:9 252:23 256:4 262:22 307:20 314:8,14 315:6 opinions 49:8,11 50:8 66:6 78:3 82:20 83:18,24 84:5,13 118:14	125:22 132:12 142:2 184:19 185:3 302:19 309:21 opportunities 275:2 opportunity 24:5 30:20 62:4 295:15 304:4 opposed 16:16 opposite 136:6 145:5,7,25 146:10 179:9 opposition 285:15 order 1:20 84:10 171:11,17 284:8 300:18,19 ordinarily 105:3 239:15,22 ordinary 5:10 20:18 oriented 296:5,8,22 origin 12:10 15:15 18:24 19:16 52:9,11,12,13 53:22 88:19 113:24 114:7 117:12,13,16 118:8 120:15 131:14 144:4 204:8 220:24 221:22,25 222:13,17 223:10 223:13 224:6 233:4 235:9 241:15 252:25 254:8 257:3 257:5,7,15,18 260:3 260:6,8,15,25 261:3 261:4,12 262:3,9,24 263:4,9,16,22 264:13 265:12,20 270:25 272:3 276:6 277:2,3 301:22,22 308:9 original 3:9,17 93:6,21 96:25	97:4 274:18 280:5 308:6 originally 94:10 95:4 originated 234:11 301:24 originates 15:19 279:3 originating 234:9 outcome 321:17 outcomes 217:5 outdoor 47:18 outlet 71:12 128:22 200:10 200:24 201:12,15 201:17,22,24 202:13,23 outlets 253:25 outline 305:13 outreach 79:17 outset 15:4 outside 44:19,22,23 46:2,22 46:24,25 47:6 49:7 51:18 52:22 88:14 90:11 91:15,24 92:25 97:20 99:14 103:6,13,20 104:23 105:19 108:23 109:8,21 125:23 128:24 129:7,13 136:2,20 137:4,6 138:21 139:9,24 140:11 141:14 142:4 144:19 145:9 146:14,19 149:18 150:5 157:25 184:21 198:6 212:9
--	---	--	---

221:7 225:10 311:2 outward 266:25 oven 199:11,23 200:6 201:16,21,23 202:12,24 203:10 203:15,17 205:23 253:24 267:5 ovens 201:13 202:15 overall 88:10 308:15 overcharge 109:12 overcharging 106:25 107:13 251:23 overflows 149:22 overheat 279:8 overheated 278:8 overlap 34:14,18 oversight 32:11,24 33:6,13 118:19 119:14,15 141:19 164:2,5 oxygen 113:5	105:23 107:11,15 108:10,10,25 112:11,22 121:18 121:21 122:15,20 122:24 128:18 130:15 215:3,10 219:14 235:6,17 248:6,7 252:2,4 286:25 292:12 packaged 88:25 packages 15:20 packs 41:7 97:12,17 98:3 101:22 102:14 103:18 109:18 112:15 248:5 page 67:19,24 68:2,23,25 70:8,12,16,17,18 81:4 83:6 85:25 86:6,13 109:23 115:10,21 121:11 123:18 129:9 130:2 135:14,18 137:14 137:20 138:14 147:4 160:19,21 161:19 162:18 174:19 175:5 189:13,23 191:10 199:6 206:8 209:5 212:25 218:23 219:21 225:13 235:4 250:2 256:18 262:15 274:3 275:9 275:9 276:20 280:2 287:21 320:6,15,19 320:24 pages 84:2,6,13 86:11 137:13 280:17 298:3 Palm 39:12 panel	88:24 221:3 233:7,12 233:14 234:4,11,17 258:13 panelling 301:12 paper 63:16,19 64:7,8 83:8 207:6,12,18,21,21 208:2,5 297:17 298:11,14,16,19 299:14 300:7 315:20 paper-thin 313:3 papers 41:5,9,14 296:21 298:24 315:17 paragraph 115:21 274:11 285:22,23,25 286:5 286:13,15,17 paragraphs 83:15,17 part 14:2,17 15:23 48:16 132:25 155:13,14 217:18 235:16 251:2 252:11 254:5 264:23 279:25 309:4 participated 34:4 particular 116:16 118:4 particularly 50:12 153:20 170:13 parties 3:7 19:2 87:23 88:9 88:18 93:16 321:15 party 51:12 passed 134:3 170:16,18,21 277:8 281:5 290:2 patent 47:24 48:2	patents 48:4 patterns 52:17 62:11 117:13 210:3 218:24 219:8 257:10 265:19,23 266:6,18,19 268:12 269:23 278:10 279:7 299:12 Pavilion 84:17,20,22,25 85:15 96:11,21 100:19 104:20 131:22 214:22 216:2 235:5 235:16 295:21 pay 66:24 67:3 paying 188:21 peer 41:2,11 53:21 54:11 56:23 57:22 58:7 people 12:2 19:5 33:25 34:6 34:19,21,24 35:3,9 35:25 36:4,5 59:12 74:8 87:11 99:25 107:3,23 118:16 119:16,18,23 120:21 122:14 153:12,19 173:20 173:25 174:6 175:14 190:14,23 251:12,16,19 269:2 303:3 306:23 308:8 308:11 perceived 122:13 percent 69:25 70:2 97:8 perfectly 201:3 perform 89:12 period 30:2
<hr/>			
P			
<hr/>			
P			
2:2,2 3:2			
P.M			
318:21			
Pacific			
234:14			
pack			
16:10 17:8 40:6,8,10			
40:16,24 73:19 92:8			
92:9,11,12 93:9,16			
96:25 97:4 104:10			
104:12,13,18			

permits 39:23	220:16 228:20 238:18,19 309:9	207:25 208:5,20 210:22 233:15 237:22 296:17 298:14,16,18 307:25 309:15 312:3 313:4,12	please 4:9 5:24 7:16 155:4 174:24
person 71:25 122:4 151:3 174:14,16 178:2 234:25	photos 88:6 116:20,23 202:19 220:7 308:6	pieces 256:13 299:14 308:2	plenty 239:2 298:15
person's 22:2	phrase 309:16	pile 44:8 101:24	plug 73:15,18 201:25
personal 37:22 69:20,22 269:6 269:12,15	phrased 16:25	pillars 257:10	plugged 200:11 203:5 220:2,4 220:8,10,13 259:7
personally 19:22 22:12 37:15 86:14 89:17 262:12	physical 28:19,22,25 29:25 30:7,13,22 31:8,18 33:2 43:25 109:4 119:24 120:11,17 130:14 132:23 133:5,8,15 134:12 139:17 141:17 185:24 194:17,18 195:16,20 196:12 211:22 216:11 217:15,21 252:20 253:8 254:7,10 268:16 270:5 272:12 294:15 302:24 318:6	pillow 169:22	plywood 211:12
perspective 149:12	pertain 61:9	pins 228:10	point 4:14 11:7 22:21,23 25:19 33:14 50:24 62:14 63:2 87:25 88:18 89:7 94:22 125:24 136:14 149:3 158:10,14 163:21 177:24 195:5,5 215:24 224:23,24 247:14 260:4 264:14 270:14 277:3 282:20 284:8,12 286:2,19 292:13,13 297:22 306:4 318:3
pertains 62:6 81:18 184:20 225:2	phase 15:9 252:8	place 87:24 181:20 193:20 194:12 319:11	points 41:5,13 50:18 113:24 274:13
phone 187:19 188:5,8,12 189:15,21 190:11 190:19 191:7 267:9	physically 95:22 97:9 209:22 256:14 264:24 288:13 298:4	places 131:17	popsicle 237:16
phones 188:19,21	PI 37:3	plaintiff 23:17 27:8 69:6,8,10 69:15,17,18,25 117:10 126:5 320:4	portion 105:16
phonetic 69:8 87:25 201:7 203:6 260:8	pick 107:8	Plaintiff's 126:22,23	ports 71:13 101:6
photo 88:20 179:21 180:6 181:2 226:24 281:24 301:5	picture 129:12 168:10 172:4 175:13 178:9 200:20 212:5,6,7 214:10,17 229:14 232:5 255:15 262:19,20 295:17 300:24 307:9	Plaintiffs 1:6 2:4	position 38:15 170:2 213:5 222:2 224:12 232:8 287:7
photograph 118:12 166:15 188:17 200:13 212:15	pictures 307:15,17,18 308:12 308:15 316:12	plan 263:14	positive 253:18
photographed 117:8	piece 14:24 207:18,20,21	plant 42:8	positive/negative 196:14
photographs 88:10 89:4 96:14 120:11 130:21,25 168:11,22 175:11		plants 42:19,24 43:4	possibilities 216:9 223:21
		plastic 213:2,22 214:12 216:25 238:23 239:12 240:21,24 290:9 292:16	
		plate 201:19	
		play 47:17 193:7	

<p>possibility 44:6 132:4 163:25 195:15 217:12 264:12 268:6 278:7</p> <p>possible 104:25 153:7 163:12 163:14 173:23 174:2 175:17,19 176:8 182:15,25 183:9 202:2 203:21 203:23 204:2 205:3 205:12,12,15,24 217:5 223:19 262:9 268:23 270:4</p> <p>possibly 101:21 125:9</p> <p>post 297:7</p> <p>post-fire 17:18</p> <p>Post-It 297:5 299:9,24</p> <p>pot 149:21,22,24,25 150:13,15,16 191:24 197:12 204:17,21 205:9 206:5 244:24 267:7 267:10</p> <p>potential 18:15 41:7 72:3 105:12 109:5 204:7 248:18 249:8 254:21 256:13,18 257:4 258:19 263:7 272:4 305:7 308:10</p> <p>potentially 269:14</p> <p>pots 245:24</p> <p>pounds 173:16</p> <p>pour 267:13</p> <p>pours 206:4</p>	<p>power 41:5,13 50:18 73:21 219:24 251:15</p> <p>powered 141:23</p> <p>practice 20:18</p> <p>preliminary 275:15</p> <p>Prematurely 128:3</p> <p>premise 186:11</p> <p>premises 181:13</p> <p>prep 66:12</p> <p>preparation 9:25 19:18 23:7,10 26:5 34:22 36:3 86:9</p> <p>prepare 9:14</p> <p>prepared 29:9 35:22 75:17 291:16</p> <p>preparing 19:9 34:10 89:14</p> <p>presence 225:21</p> <p>present 2:14 4:18 8:13 38:5 74:9 102:17 270:25</p> <p>presentation 60:3</p> <p>presentations 50:15,18 77:17,19</p> <p>presented 41:6 68:22 77:18</p> <p>presume 97:7</p> <p>pretty 14:23 35:5 72:21 76:12 86:23 101:6 142:10 163:10 167:4 237:21,22</p>	<p>270:11 318:4</p> <p>previous 76:7</p> <p>previously 6:6 26:21 27:19 83:7 127:20 129:20</p> <p>principal 53:14,15</p> <p>principally 52:7</p> <p>principle 198:8</p> <p>prior 17:25 18:18 23:2 43:11 48:19 157:8 181:15 239:14 247:18</p> <p>privilege 20:12</p> <p>privy 275:2 293:17</p> <p>probable 163:16,18,25 164:12</p> <p>probably 6:12 36:6 69:16,24 78:19 80:6 92:25 98:7 100:8 103:8 112:20 142:13 155:22 158:20 160:13 226:3,4,11 228:15 246:14 277:17 282:19 295:10 311:15</p> <p>problem 45:13 84:11 231:17</p> <p>problems 234:22</p> <p>Procedure 1:22</p> <p>proceed 9:2</p> <p>proceeded 183:17</p> <p>proceeding 5:14</p> <p>proceedings</p>	<p>37:18</p> <p>process 6:3 26:3 42:16 48:16 88:16 104:3 106:19 132:25 238:20 270:16,20 271:20 271:21,24 272:7 308:4,21</p> <p>processed 12:9 88:19 261:2</p> <p>processing 141:2 314:11</p> <p>produce 6:20 158:7 165:23 167:10 171:11 197:16 206:16 242:2</p> <p>produced 158:9 232:10</p> <p>produces 292:15</p> <p>producing 167:15,25 229:21 232:8 246:17 258:25 259:9,10</p> <p>product 13:18 48:17,21 49:14 49:20,21 50:3,19 51:6 52:3 71:24 72:4 73:13 74:4,5,7 74:10 81:21 93:6,22 101:13 105:2,4,6,11 105:18 185:5</p> <p>product's 51:23</p> <p>production 126:24 258:25 262:25</p> <p>products 13:13 48:10 71:6,7,7 71:21 72:5 80:23 81:6</p> <p>professional 37:5,8 40:23 182:16</p> <p>progressed 158:6 266:24 302:7</p>
--	--	--	---

progressing 167:15	1:23 4:4 56:24 58:3 60:12,15 61:16,20	168:9 170:4 183:25 208:22 211:4	129:8 132:17 136:3 142:6 144:7,8,25
projectile 98:22 304:8 314:3	61:21,24 62:2,3,5 62:13,22 319:22	228:15 245:12 261:4 269:2 277:18	145:3,22 147:6,13 148:9,12,15,18,24
projectiles 195:7 286:2,23 288:19	321:7 published 29:12 53:21 55:13	279:22 280:16 284:3,14,23 287:2	149:2 150:18 151:12 152:24
proper 48:12 50:3 251:11,22	pull 49:5 109:24 126:15	292:25 296:16 297:24 306:19	153:15 157:14,17 157:19 158:3,16
properly 42:18 44:24 48:11,18 50:20 106:14,15 154:4	127:22 139:15 164:23 165:10 166:16 255:14 279:21	312:15 315:22 317:5	160:10 162:2,14 163:8 166:22 169:8
property 38:19 88:10 120:2 273:11 284:4 293:3	pulled 179:12	puts 257:11	169:24 170:7,22 172:11 175:4,16
proposal 57:16	pulling 123:12 126:13 156:19	putting 116:22 125:9 281:3 283:9	177:13 179:2,3 182:24 190:22
protect 106:12	purchase 92:20 127:19 128:5,7 128:10,14	Q	195:13,23 199:11 202:22 213:6 220:2
protected 164:19 168:5 169:7 170:15 172:22 190:12,20 208:17 214:13 231:3 248:10 298:5,6 300:3	purchased 92:17 94:21 96:7 104:7,11 126:10,10 129:5 184:9,13,15	qualifications 96:18	220:23 227:4 229:8 229:16 230:12
protecting 299:14	purchasing 95:23 122:6	qualified 48:5	231:22 232:3,23 234:3 241:15
protective 168:8	purpose 124:23	qualifies 50:12	242:10 243:22 248:22 249:5,7
protruding 298:25	purposes 64:25 202:22	quantity 150:21	250:15 257:19,21 262:5 263:25
prove 57:6	pursuant 1:20	quarter 211:10	267:20 272:24 274:15 275:25
provide 100:12 234:20 255:20	pushed 175:18 176:8 177:14 180:23 296:18	question 5:2,22 6:20,21 7:2,4 7:5,7,10,15 8:21 9:4 9:8 10:11,14 14:11 16:13,19,22 21:12 26:23 27:12,15,16 27:17 29:16 33:4 35:24 41:10 42:14 50:4 51:13 54:21 56:6 66:22 80:25 81:7 84:8,11 93:2 95:17 96:10 97:13 97:21,24 98:15 103:5 104:13 105:24 108:17 109:15,20 110:11 116:13 120:4 122:13 124:14 125:13,16 127:4,7,9	280:4 285:4 289:5 289:16,19,21 290:16 291:4,20 300:23 302:19 307:6 310:13,21 312:24 313:8 315:11 320:24
provided 11:18 24:21 25:17 26:11,13 28:16 29:12 135:2 200:3 219:24 254:22 256:12 269:20 274:12,21	pushing 213:19 298:2		question's 198:5
public	put 35:10 42:21 63:7 64:9,12 67:16 84:9 87:23 95:24 100:23 116:18 118:3 120:6 122:19,23 125:22 126:7,11,18,22 127:2 131:21 137:8		questions 4:21 12:18 18:4,9,10 18:16 19:7,12,17 20:12,14 21:6 22:8 22:18,22,24 24:14 24:21 26:12 77:8 122:5 127:8 291:15 293:5,7,10,13 294:10 303:9 317:20,22 318:19 320:23

quick 12:23 83:19 151:19 226:20	21:4	really 13:11,21 18:20 31:15 42:17 43:5 57:18	24:15 93:10 94:23 126:9 128:11,12
quicker 294:7	rate 143:6 196:19 248:11	60:17 101:10 109:9 125:10 143:23	receipts 104:8,9 241:13
quickly 6:18 142:10 272:23 273:20 274:2	ratings 247:11	188:21 195:14 197:2 227:22	received 39:3 63:3 200:4 307:17
quit 251:18	re-review 50:21	245:19,21 272:19 288:12 295:8 318:11	receives 299:19
quite 30:15 43:6 272:18	reach 47:4 146:22 171:11 172:24 197:22 201:24 202:12 207:11	rear 155:2,4,6	receiving 18:11 19:12 24:22 26:12
quote 219:2,6	reached 246:18	reason 9:7 25:11 26:6 56:5 62:16 75:4,5 135:4 135:8 145:6,8,21 146:17 181:8 199:2 257:15 264:8	receptacle 200:14 219:25 222:24 255:4
R	reaches 150:6	reasons 223:9 258:16 259:25 303:6	receptacles 200:13,16
R	reaching 84:5,13	rebuttal 8:4 9:17 18:15 19:18 29:13 65:7,8,17,20 82:17 272:21 273:19 274:4,17 275:19,21 293:19 295:20 320:9	rechargeable 99:11
2:2 3:2 4:2 319:2 321:2	reaction 113:5	rebuttals 275:20	recollect 32:2 132:15
radians 246:11	reacts 190:17	recall 11:6 24:11 33:8,11 48:7 74:17 75:4,5 80:14,18,23 81:5 84:19 85:17 96:22 96:24 116:4 119:17 120:22 168:23 176:13 184:8 192:19 228:18 233:12,16 234:15 234:17 279:22	recollecting 31:21
radiant 193:3,15,16 194:6,7 195:10 197:15,23 206:15 213:19 214:15 215:19,23 216:14,15 225:19 225:20 230:23 231:13,23 300:21 301:6,8 302:5	read 5:18 7:4 83:19 127:6 137:17,19,23 138:4 138:6 174:24 189:2 206:18 235:11 242:10 243:9 252:21 253:10,14 282:5,5,10 286:14 298:4	recalled 51:6,7,24 52:3 74:5 120:6 233:7,20 234:4	recollection 32:4 85:22 132:18 138:19 163:4 165:18 175:6 188:7 189:20
radiation 171:25 231:24	reader 70:13	receipt	recommendation 50:25 51:12
radiative 299:19 303:11	readily 314:17,21		recommendations 96:18
rain 44:22	reading 127:16 235:15 282:4 286:12		recommended 22:10
raised 274:13	readings 91:13		recommends 22:6
ran 303:4	reads 6:20 212:8		reconvene 88:13
range 142:21 143:9 157:3 303:18	real 83:19		record 4:10,16 39:18 116:18 321:12
rapidly 157:22 167:4	realized 292:25		records 66:10,11 72:23
rapport			recycle 43:24
			recycling

42:3,9,12,19 43:4 43:11 44:16 45:15 46:15 47:18,20 102:2 302:22 red 212:10 226:15 227:2 231:5 297:14 298:9 298:25 304:18 306:15 refer 8:8 64:25 65:20 77:7 85:3 109:7 113:15 114:7,19 reference 84:24 referenced 86:10 126:14 references 64:4 86:6 referred 79:8 271:3 referring 20:8 27:5 76:8 85:2 127:20 128:8 210:24 285:21 refined 148:7 reflected 66:2,9 84:6,14 refresh 32:3 85:22 138:18 163:4 165:17 175:6 188:6 189:19 refrigerator 200:15 201:23 202:3 202:8,10 281:25 regard 254:21 regarding 254:23 regular 56:13 regularly 32:24 40:19 55:10 101:6 207:13 reimbursed	66:21 reject 61:25 relate 48:13 related 273:5 321:15 relates 300:10 relevant 56:3 62:21 144:4 234:18 reliable 133:25 153:20 relied 217:19,22 268:19,21 270:7 274:16 275:23 relying 153:17 182:22 195:21 remade 177:5,7 remain 46:8 remainder 155:18 remaining 91:13 102:21 159:5 remainor 154:22 remains 30:22 113:25 129:25 130:15 133:5,9,15 133:17 227:3 229:12 230:2 272:5 311:25 315:20,21 remember 6:7 11:9,14 12:6 13:18,21 17:14 31:12,14,16 49:2 81:12,20 82:13 86:18,20 87:20 120:8 128:10,13 134:4,9,10 156:14 162:9,12,13 165:11	166:3 171:4 187:11 187:15,24 188:2,8,9 188:14 230:13 252:6 282:16 283:22 297:19 remembered 102:4 remembering 32:9 160:12 remnants 131:4 remote 167:2 187:14 295:8 remotely 5:14,15 removal 88:16 remove 278:17 removed 96:9 165:25 178:18 179:8 removing 175:21 render 75:8 rendered 78:4 rental 151:8 repeat 8:24 10:10 14:11 21:11 27:16 45:12 80:25 84:8 179:2 310:21 rephrase 8:24 16:13 42:3 74:3 94:12 replace 101:18 122:6,15 replaced 95:12,20 replacement 95:5 104:6,11 108:25 132:10 133:18 252:4	replacing 95:22 124:17 report 8:3,4,7 9:16,18 12:22 18:15,19 19:10,18 19:24 20:3 23:11 24:23 25:14,20 26:6 29:12 34:10,22 35:7 35:11,22 36:3,4 62:21 63:8,10 64:3 64:11,13,24 65:2,4 65:7,8,17,21,23 67:17,19 68:5,24 75:8,11,16,17,20 76:14 82:16 83:6 84:7,14 85:25 86:9 86:11 89:14 109:23 115:11,19 118:10 123:6,12,18 129:10 135:15 136:17 147:3 153:19 160:19,20 161:9,10 161:20,21 164:22 166:15 191:11 224:15 226:10 253:13 272:22,24 273:19 274:4,17,18 275:17 276:3,20 279:24 280:17 287:21 300:10 320:8,9 reported 39:8 161:2,4,5,22 219:25 220:9 reporter 4:19 8:18 63:12 65:11 77:5 reporting 196:24 198:9 reports 18:11 19:13 24:16 26:13 36:7 61:10 66:3 77:11 82:19,21 200:4 274:13 275:19 represent
---	--	---	--

4:17 70:3 83:17 127:8 223:18 represented 20:23 21:18,20,23 22:3 representing 21:7 reproduction 42:21 request 9:7 57:16 126:24 requested 88:2 291:17 320:18 requests 200:5 required 60:24 requirement 115:8 research 39:9 55:12 147:19 reserved 3:22 residence 4:24 5:5 225:18 residences 273:2 residents 187:2 resolve 284:20 resource 55:2,4,5,10 56:13 58:10 resources 55:14 56:14 respect 5:5 19:8 20:7,11 26:15 29:9 32:5 34:9 49:24 50:13 54:21 60:5 69:23 85:8 117:5 127:20 141:16 148:7 164:3 175:7 181:3 184:25 188:24 221:22 233:25 256:4 278:6	293:6 respective 3:6 respond 46:15 responded 42:23 182:24 199:15 199:24 responder 223:22 response 263:20 294:22 295:6 295:10,12 responses 126:23 rest 6:25 72:19 133:10 165:4 193:13 315:13 restricting 298:23 result 16:16 271:10 resulted 110:21 235:6 resulting 213:3 307:22 retain 51:12 236:7 retained 17:15,23,24 22:16 49:7 51:19 69:6 79:5,10 90:13 105:16 129:7 225:11 320:11 retreated 157:13 243:16,18,22 retrieving 177:6 returning 287:13 review 8:10 18:11 20:14 23:8,13,16,25 35:15 41:3,11 48:9,15,17 49:4,15,18,20 50:18	53:22 55:23 56:24 58:3,4 63:6 97:14 97:19 98:14 99:19 104:22 105:17 185:23 reviewed 9:16,17,17 22:25 23:5,11 25:16 26:8 28:5,10,10,12 36:7 54:11,11 57:22 58:7 78:12 85:24 86:8 110:9 123:5 138:17 139:23 175:5 176:21 181:10 189:18 199:4 reviewing 19:24 28:15 61:20 65:19 74:4 76:16 185:10,18 reviews 13:5 revise 59:22 revised 59:2 62:20 272:18 revision 61:15 revisions 60:5 61:7 revisit 59:22 rid 297:23 ride 60:24 right 8:2,14,19 9:20 16:17 17:4,9 18:2 20:9 23:3 30:17 38:16 43:16 44:3 45:18 48:17,22 49:24 53:4 53:10,11,18 54:4,10 55:21 56:23 57:14 57:23,25 59:9,21 60:3,21 61:19 64:6 69:19 70:11 77:4,21	85:23 86:25 90:25 95:20 96:3 105:9,18 106:9,17 107:6,10 107:12,20,25 108:6 109:22 110:4 111:16,24 113:4 114:16,19 115:10 115:25 117:16 118:22 119:22 120:8 121:7,23 122:20 123:6 126:3 126:13,17,22 131:5 133:25 135:22 136:20,23 137:6 139:14,25 141:10 144:22 145:19 146:15 147:13 148:2 149:21,23 150:13 151:20,25 152:7 155:24 156:9 160:18 162:15 165:9 167:17,21 168:16,20 170:7 172:5,15,20 173:2,7 173:14 174:15 176:5,17 177:2 178:2,4 179:19 180:12 181:16,21 181:24 182:21 186:15 188:16 190:8 191:20,24 192:20 197:9,12 198:23 200:18 202:18 203:20 206:18,22 207:18 207:20,21 208:2,3 210:11 211:13,17 212:2,4,15,18,22 213:19 215:16 216:10 217:13,17 219:3 222:9,10 224:4,17 225:4,9,18 227:18,19 228:11 228:22 230:8,13,14 231:4,7 232:14 235:2 237:10,11,12
--	---	--	---

237:17,17 241:24 242:8 245:20 246:9 246:19 248:15 249:19 251:8,13,19 252:14 254:11,12 255:2,4 256:5 258:7 258:20 259:4 261:18,25 262:9 264:16,23 268:25 273:5,9 274:5 277:13,23 279:14 281:7,9,11,14,16,18 281:18,20 282:3 283:5 284:5,16 285:20 287:16 288:8 289:14,19 290:4,8,25 291:2,19 292:6,14 293:5,8,18 294:8 296:22,25 297:7,8,11,20 298:6 298:14 300:23,25 303:21 305:14 307:12 308:3 312:25 313:16,19 313:22 315:8,16 316:3,15,21,25 317:18 rises 191:18 risk 45:10 road 187:23 189:10 216:22 Rochester 2:8 Rocket 237:17 roll 237:5,8,22 247:5,22 248:7,18 249:3,8 255:13 272:6 304:7 305:17 romance 264:23 romantic	264:19 roof 278:12 room 8:14 12:10 18:23 31:12 55:22 88:18 113:12 114:6 121:8 131:13 136:20 149:14 150:5 155:10 156:2,4 159:12 165:8,12,19 165:22 167:5 168:7 170:3 172:25 174:10 188:10 192:2,12,24 193:14 193:24 194:19 195:9 196:16 197:6 197:9 207:5 209:13 209:13 210:21 211:5 214:6 216:14 221:25 222:6,13,17 223:10,13 224:6 226:19,23 233:3 235:8 241:14 242:4 244:24 245:3,3,7,10 246:5,5,9,22 248:8 252:25 257:3,4,6,9 257:12,15,18 259:7 260:3,6,8,15 261:11 262:25 263:3,9,23 272:2 276:15,17 277:2,25 278:24 281:7 282:10,16 283:3,7,15,23 285:24,25 286:18 287:10 288:4,6,9 290:3,14,15 291:8 291:11 294:20 302:6 308:2,9,16 311:3,13 314:23,24 315:13 room/living 156:3 rooms 262:9,13 314:20 rough	148:3 route 4:13 289:10,17 rude 7:8 rule 109:4 131:20 132:3 209:10 220:23 265:10 268:10 270:9 ruled 217:11 223:19 262:12 Rules 1:21 ruling 216:4 266:16 269:13 RULINGS 320:23 run 43:12 73:16,19 106:16 110:18 119:17 120:10 runaway 43:21 45:4,11 47:13 75:2 99:6 106:20,23 107:16 108:3 112:11 113:22 159:14 193:19 194:11 195:11,25 196:8 197:19,25 216:17 248:19,20 248:22,23,25 302:10,16 303:21 303:25 running 46:11 74:11 225:6 runs 106:19 207:23 ruptured 160:7,11 ruptures 160:2 <hr/> S <hr/>	1:3 2:2,5 3:2,2 4:2,2 4:2 320:2 safety 61:6 96:18 98:7 104:16,20 105:3,6 105:10 106:9 236:4 sale 101:22,22 108:16 salt 132:20 sample 253:19 Sarasota 39:12 saw 24:8 29:3,20 33:6 119:4 121:9 123:8 130:12 135:21 155:24 156:11,13 158:18 188:12,20 195:18 196:18 209:23 216:12 220:13 276:10 279:13,19 284:6 287:15,18 289:13 290:3 307:14 309:11 saying 31:25 45:20 56:2,20 58:8 111:8 114:12 141:5,13 142:23 145:22 150:8,11 165:11 167:22 172:5,7 179:13 186:15 188:9 196:8 196:13 201:8 202:5 213:15 215:6 217:3 217:10,11 224:4 227:21 229:16 231:16 232:12 244:3 253:15 254:5 261:21 265:6 277:20 283:10,12 283:13 286:12 290:12,18 291:19 291:23 292:8
---	--	---	---

says 110:8 116:11,12 118:24 157:11 161:22 162:20 181:24 189:14 200:25 202:25 203:6 206:14,15 222:9 252:18 270:20 274:11 282:12 283:4 285:12,18,23,24 286:5,17 287:22 288:3,7 289:9 290:21	Schwartz 291:21 293:10 Schwarz 2:9 4:20,25 5:11,16 9:13 10:6,16 22:9 23:21 24:19 26:22 27:20 68:13 79:6 140:3,6 146:2 178:13 189:22 190:4 203:3 231:20 291:18 293:8 318:13,18 Schweke 1:22 4:19 5:25 77:4 317:13 321:7,23 science 36:2 57:5 133:2 261:19 science-related 59:23 scientific 14:3 15:8 20:15,17 25:23 26:2 32:22 59:13 86:5 111:10 132:22 218:7 238:10 252:7 255:6 255:10 258:23 271:7,21 scope 49:7 51:18 52:23 90:12 91:16,25 92:25 97:21 99:14 103:6,13,16,21 104:23 105:19 108:23 109:8,21 125:24 128:25 129:7 184:22 185:7 221:7 225:11 257:22 263:12 scorched 231:4 screen 13:6 63:16 64:10,12 70:15 127:2 213:3,9 213:17 227:10,15 280:16 291:13	296:8,11,12,20 scroll 64:14,17,19 67:24 138:13 210:8 scrolling 70:7 138:10 se 125:11 sealing 3:7 seated 165:7 169:11 second 23:13 113:13 126:19 145:12 151:22 152:22 155:14 163:23 190:12 192:20 217:18 219:14 282:15,24 285:22 286:21 287:11,19 288:14 289:6 291:5,21 292:24 294:4 secondary 15:20 113:16 114:8 114:22,25 219:10 219:18 229:13,17 236:18 237:3 239:6 241:16,18 244:12 247:2,21 250:8,14 271:12 304:17 307:11,21 seconds 149:16 155:22 157:3 317:11,16 section 56:2 60:6 62:23 83:12 115:19 135:11,24 242:21 243:11 252:15 253:7 254:5,13,16 256:11,16 258:7 274:10 275:14 284:23 301:18 sections 61:14 62:12,17	secure 210:23 211:5 secured 35:17 see 23:18 24:6,7 32:17 32:24 42:18 48:10 48:17 49:20 50:2,19 50:22 58:11 63:13 64:15 65:14 67:20 67:25 69:2 70:19 79:21 80:16 83:10 83:12 102:2 104:14 110:5 115:12 116:25 118:6,10 121:14 123:20,24 125:18 127:2 129:10,11,16 131:3 133:7 135:16 136:15,15 137:9,13 137:15,20,21 138:5 138:11,14 156:8 157:10 160:21 161:3,23 162:17 164:7,19 165:15 166:11 168:13 169:21 170:15 174:20,21 180:10 181:2 185:4 187:3 189:13,15 191:13 191:20,21 198:14 199:8 200:2,10,16 200:18,21 201:12 201:25 202:9,19 204:5 206:9,10 208:15 209:15 210:4,8,11,21 211:16 212:11 214:11,16 219:5 220:3,10 224:5 226:4,7,12 228:3,4 228:6,6,21,22 229:22 238:20,23 241:22 242:19,20 243:5,17 248:7 250:2 252:15,15
---	--	---	---

256:17 263:14 264:15 265:8 266:5 266:9 275:8,11,17 276:22 278:17,19 278:22 280:20 282:9,17,18,21 283:6,17 284:9,10 285:2,5,7,11,15,20 286:3 287:11,12,23 290:8,19,20,21 291:18 292:2,6,7,20 292:24 295:22 296:21 297:3,4,9,13 298:7 299:6,8,22 300:7 301:7,19 304:4,12 308:7,18 314:19 316:11 seeing 16:24 128:10 162:12 188:8 284:16 285:15 287:6 seeker 262:2 seen 97:4,8 99:8,9 118:12 130:24 160:3 163:3 167:19 168:22 227:21,22 248:9 262:20 263:17 277:11 284:17 286:23 306:14,17 306:20 307:8 309:18 sees 195:9 215:16 216:15 283:2,14 288:19,24 290:11 select 15:11 252:13 self-extinguish 230:17 sells 244:19 seminar 77:20 send	20:12 57:17 67:11 147:9 236:11 sense 52:15 94:18 113:10 115:9 146:7 148:16 148:25 150:24 151:12 152:11 153:4,23 218:11 230:20 238:10 254:15 288:16 sent 10:23 38:25 57:15 68:6 sentence 206:15 286:14 separate 198:6 separately 308:20 sequence 110:24 111:16,22 113:11 254:23 271:15 sequences 252:19 254:22 service 3:16 187:18 189:4 serviced 121:13 set 71:19 74:6,12 82:19 136:5 142:8 144:3 145:11,24 146:9 149:9 153:9 203:15 204:25 205:4,8 268:6 269:14 321:11,20 sets 266:2 setting 11:20 182:21 195:20 203:10,15 settled 70:22 71:3,4,9 73:12 81:25 245:22 seven	80:6,7 255:9 258:9 sewing 240:6 shadow 201:21 shape 200:22 She'll 39:21 sheathing 211:7 sheet 11:25 87:21 sheeting 210:22,25 211:2 sheets 164:20 240:11,25 269:16 shelves 300:3 315:20 shoot 305:14 shooting 159:23 236:6 248:8 295:13 314:20 short 152:2 273:22 shorting 44:7 shortly 17:24 86:24 144:21 shoulders 231:8 show 70:14 147:22 165:12 189:23 232:6,21 260:5 262:24 276:14 301:2 305:12 showed 121:6 210:6 showing 181:18 199:7 shown 59:21 169:14 210:10 304:8 311:18	shows 31:19 119:25 210:5 shrapnel 112:16 193:23 310:3 shut 87:7 155:7 209:19 223:7 258:14,15 281:4 sic 27:9 side 12:5 136:6 145:5,7 145:25 146:10,22 147:11 148:13 173:2,5,7,11,12 176:5,7,16,20 177:2 178:3,4,10,11,23 179:11,13,21,24 180:5,14,15 191:20 199:7,10 212:2 267:3 285:10 297:5 311:13 sides 176:23 178:8 179:9 278:11 312:9 sidewall 299:9 sifted 35:17 sign 5:19 sign-in 11:25 87:21 signage 17:20 signal 187:16 signed 3:10,12,15 24:7,9,10 significance 66:2,5,9 78:3 83:25 84:5,12,15 190:13 233:6 269:6,12 significant 66:6,7 77:15 116:7 184:25 198:3
---	--	--	---

signs 59:16 224:7	six 80:5 81:22 113:24 280:21	153:12,18 154:9,11 154:12 282:6	193:22 256:24
silence 183:16	six-foot 202:17	smeller 151:4	smoldering 246:16
silenced 136:19 289:24	size 157:5 191:25 249:11 313:5,10	smells 288:17	snow 44:22 46:5 82:9
similar 49:23 100:5,17 120:15 144:24 215:22	sleeping 120:23 139:12 140:12,22 156:16 173:4,20,25 175:14 176:5 178:2 179:9 179:10 180:11 186:14 187:10 198:23 203:22 205:20 250:18	smoke 119:20,22 135:20,25 136:6,8,11,24 137:10 138:20,23 139:3,9,18 140:21 140:24 141:6,8 142:9,11,18 143:3,3 143:7,10,24 144:3 144:10,17 145:4,7 145:24 146:9,21 147:6,9,18,22,23 148:4,7,10,13,22 149:15,18,19,19,23 149:25 150:4,6,16 150:16,19 152:8,20 153:10,12,13,14,18 153:23,25 154:3,5,8 154:11,16 156:21 157:12,15,20,24 158:3,7,9,18,20 159:3,8 165:21 166:24 167:16,25 168:2 169:4,6,8 170:8,11,23 171:8 171:10,15,20,24,25 172:5,13,14,14,20 172:25 183:4,15,16 186:8 187:9 192:3,3 192:5,16 197:4,7 246:17 279:18 280:22,24 281:3 282:6 285:18 286:6 286:16 288:17,18 289:12,25 290:20 292:15	Sodus 4:13 89:7
simple 105:7	sleet 44:23		sold 94:10 95:4 108:20
Simpson 251:17	slide 304:9		sole 269:20
singed 228:6,23 229:23	slightly 148:8		solid 228:5
single 270:8	slow 295:6		somebody 174:12 176:8 258:13 258:14
sir 5:3 6:4 8:15 9:21 12:15 37:20 40:5,11 40:14 46:13 49:12 98:24 136:3 157:14 256:20 267:20	slower 64:18		somebody's 223:6
sit 12:17 22:17 53:13,14 77:22 94:25 161:12 164:9 225:7	slug 237:12,24 238:5 240:7,15 247:5 249:12,18 254:2 255:13 304:6,7,16 313:19 314:3		somewhat 292:19 295:11
site 10:22 11:4,13,24 12:9 18:22 19:3,5 19:16 28:23 29:4 35:18 93:25 131:10 183:14 220:4 260:2 274:24 295:3	small 158:10 290:8,10		soon 151:7,9 152:5 230:14 308:14
siting 62:18	smaller 246:9 249:22		soot 118:6 170:3,8,11 171:11 209:14
sitting 33:12 39:21 47:5 62:14 94:14 168:6 172:21,22 201:2 299:5 316:4	smell 147:6,10 148:10,13 148:17,22,25 150:22,24 151:9,13 151:19,23 152:7,8 152:11,14,18,21 153:2,4,13,23 280:22 289:25		sorry 14:12 16:24 23:22 38:22 70:10 72:19 81:2,16 83:20 84:9 89:22 90:14 91:2 110:3 123:22 127:24 151:15 155:3 161:16 164:24 179:4 215:5 224:18,18 242:25 256:7 292:4 310:22
situation 15:22 156:25 231:6	smelled	smoked 152:4,6	sort 45:23 128:11 167:7 273:13 279:8 303:6
situations 119:18 255:21		smoker 151:9	sound 160:6 179:3 219:3
		smoking	sounds 83:2 85:23 159:22 256:2
			source

12:11 110:13,24 111:5,15,24 112:3 112:10,18 113:8 121:18 204:7 218:3 218:19 236:2,21,24 247:21 250:6 252:20,25 253:9,20 254:2,7 255:23 256:3 258:19 263:7 270:22 271:14 272:5,14 305:7 310:6 314:13 sources 41:8 55:17 218:2,14 223:14 250:13 255:12 256:13,18 257:4 270:24 271:11,25 272:2 307:11 space 81:24 82:11 88:20 105:7 141:4 167:6 167:23,24 209:25 257:24 261:12 283:15 speak 317:12 spec 221:18 specialist 38:24 specific 9:24 33:9 50:5 76:13 98:11,17 111:12 specifically 41:25 48:14 193:11 247:7 251:4 specifics 79:5 specified 319:11 spoke 11:10 spoken 10:5,14 11:23 spot	262:4 spread 154:21 155:16 158:14 209:2 spreads 218:25 square 119:7 211:8,9,10 231:17 300:4,6 squaring 230:22 SS 321:4 stack 297:24 stacked 240:9 297:20 299:21 300:2 staff 35:13,14 stage 61:17 194:3 215:18 215:25 226:18 255:9 258:22 292:11 stamp 132:11 stand 191:4 standard 98:10 standards 96:20,22 97:11,17 99:11,17,18 standing 168:2 169:5 171:5,7 194:4,4 195:8 197:8 197:15 276:7,14,17 278:2 308:13 standpoint 126:6 302:15 Staples 1:10 2:11 4:17 start 175:22 192:5 196:7 215:2,9 226:4,12	227:23 233:17 243:24 250:11 263:13 266:12 304:14 started 74:22 80:5 134:15 135:7 136:5 142:8 145:23 146:9 147:8 149:9 154:16 158:6 166:18 185:12,22 198:23 227:7,19 233:13 260:21 264:7 266:8 272:11 308:21 starting 39:4 218:11 297:2 298:8 299:7 300:8 starts 186:12 192:2 204:25 state 1:23 4:4,9,13 21:2,16 72:15 86:13 104:19 121:11 165:3 235:4 242:13 247:15 321:4,8 stated 95:19 123:19 124:9 144:18 147:4 161:9 180:4 184:14 212:25 243:20 263:20,24 276:21 280:21 295:24 statement 23:2 24:25 25:11,17 26:7 27:3,11 34:13 57:18 76:25 80:3 83:22 93:23 114:11 117:8 125:19 133:21 134:7,16,20 134:23,25 135:5 154:14 179:4 183:12,25 184:2 185:2,13,19,19 194:13 196:17 199:16,18 200:3 201:5 203:22	204:11,14 205:19 217:16 274:12 277:6,11 279:23 285:17 311:9 statement's 59:21 statements 11:18 25:5,8,25 26:9 27:24,24 28:11,12 28:16,18,21 29:6,10 30:6,11 31:18 120:17 124:7 125:4 133:12,23 163:17 186:4 194:16 196:21 210:2 216:8 217:19 257:11 263:18 265:19 268:12,15 269:20 269:23 270:6 277:5 states 1:2 39:7 96:17 146:12 160:25 186:6 190:9 209:19 219:21 279:12 stating 284:25 stay 61:4 317:14 stayed 103:21 staying 44:24 steel 72:13 81:10 232:14 steering 261:22 STEPHEN 2:9 stepped 281:7,10,15,20 283:5 287:23 308:14 stepping 308:10 steps 88:15 255:9 Steve
---	---	---	---

5:9 68:16 92:5 103:5 202:25 203:2 251:21 302:18 303:9 stick 197:11 246:13 stickers 96:14 sticking 248:9 stinks 151:22 STIPULATED 3:5,20 stipulations 5:10,13,18,20 stock 100:23 stool 238:23 239:12,24 240:24 stools 240:21 stop 308:16 storage 44:13,14 45:8,10,17 85:13 107:14 store 42:20 126:7 128:23 stored 42:25 44:19 45:2,8 45:16,20 106:13,14 118:22 119:10 238:22 239:9,20 241:2 315:10 storing 44:18 46:6 stove 264:17 straight 248:13,15 Street 2:8,12 strength 163:11	strong 31:10 structural 76:3 structure 30:21 73:22 88:8,11 88:13,25 147:22 153:25 166:25 167:16,21 186:23 187:2,5 192:6 234:22 244:24 262:11 264:11 studs 278:19,20,21,24 279:5 stuff 60:20 80:18 112:14 148:3 208:16 297:14 300:4 310:15 315:18 subcontractor 72:3 subject 54:3,24 60:4 305:13 307:23 subject's 128:17 subjective 196:21 subrogation 69:19,22,25 71:23 126:5 Subscribed 319:18 subsequent 92:19 275:9 subsequently 127:10 substance 9:12 substantially 108:19 suck 209:17 sued 37:16,16	suffer 216:6 sufficient 25:13,19 110:14 112:14 150:21 236:8 241:4 sufficiently 170:23 suggest 309:14 suggested 30:2 62:25 223:23 suggesting 309:13 Suite 2:8,12 summarize 115:15 267:21 summarized 83:25 summarizing 219:7 267:16 summary 36:9 38:3,12 71:6 83:17,23 89:10 145:13 270:9 summer 46:3 sums 270:11 sun 231:10,13 suntan 230:25 supplemental 20:7 23:17,23 25:3 28:2 82:20 275:24 279:11 290:19 291:16 293:6,22 supplied 62:3 241:3 support 30:14,23 34:9,15 35:12,14 117:13 132:24 141:18 198:17 208:19	260:5 261:10 265:23 266:6,18,20 272:11,13 supported 194:16 195:17 217:16 supporting 271:2 supportive 270:6,7 supports 134:13 196:12,17 205:20 216:12 275:6 279:6 suppose 114:23 supposed 266:3 suppression 43:9 sure 13:21 16:12,14 17:6 17:16,22 57:18 59:14 61:4 64:16 93:13 116:9 128:9 144:6 162:6 163:11 164:4 165:14 166:21 172:10 190:2 270:18 287:17 305:10 308:13 surface 312:3 surfaces 206:17 surmise 157:5 surrounding 313:16 surveillance 43:8 survey 257:20 258:6 surviving 294:23 susceptible
---	--	---	---

222:7	157:16 166:18	168:16 191:23,23	254:25 291:22
suspected	174:24 179:7	193:11 208:15	293:4 307:9
270:24	195:19 200:19	212:14 214:18,20	temperature
suspicion	202:18 207:18,25	215:15 219:7	45:9,10,17,24 46:8
268:3	208:20 243:23	222:11,14 230:11	46:16,19 47:16,19
sustained	244:10 247:15	231:23 237:6,20	99:5 172:16,18,24
259:2 306:6	273:22 278:14,16	245:12 253:3	196:6 197:10
switch	280:15 289:16	263:14 284:15	301:11 303:16
105:9 279:9	300:4 317:4,11	285:4 288:12 294:2	309:22,24 310:7,8
switches	taken	303:23 304:5,16	temperatures
285:14	1:19 25:25 83:4	talks	44:19 47:4 112:20
sworn	91:13 135:13 144:3	189:14 253:7	148:4 197:23 198:3
3:10 4:4 5:15 319:5	144:16 150:12	tall	213:21 276:9
319:18 321:11	155:8 242:5 265:16	276:13	ten
synthetic	289:11	tape	35:9 36:5,6 100:8
241:11	takes	296:17	tent
synthetics	87:24 151:18,23	target	308:17
241:7	152:22,23,23	59:4,8,9	tents
system	taks	task	88:21 308:7 315:22
75:23 76:6,21 98:6	258:6	60:13 62:8	316:6
102:22 104:4	talk	tasked	term
187:13 225:12	56:22 84:25 110:23	103:20	30:8 249:11 259:15
232:22 235:5,16	114:4,21 251:7	team	terminal
256:23 268:22	255:17 304:3	9:14 33:25 34:16	279:10
systematic	talked	35:6	terminologywise
263:12	10:20,21,22 44:12	technical	114:3
systems	80:21 102:3 107:18	53:13,15 146:7	terms
43:9 106:11	109:3,11 121:16	161:17 307:4	99:24 110:18 111:3
<hr/>			
T			
<hr/>			
T	132:14,16,16	technician	158:14 251:8
1:19 3:2,2 4:2,11	137:10 167:8 184:5	35:14	253:12
319:2,15 320:2	197:3 216:19 229:6	technicians	Tesla
321:2,2	246:25 250:12,13	34:8,9	108:2
table	250:14 251:4	technique	test
168:6 264:20	256:22 257:12	259:14,17	14:4 15:11 57:12,13
take	265:2,7,21 267:2,4	technology	89:17 90:4 98:22,22
9:6 12:14 35:13,14	267:5,6,8,11,19	39:9 129:14	229:5,6 252:12
68:12,16 82:24 89:3	269:25 299:4	techs	tested
98:4 120:11 127:12	300:15 301:13	34:2 35:16,18	57:20 90:5
132:2,18 133:11	302:8,24 313:18	tell	testified
136:4 142:7 145:4	316:24 318:7	8:22,25 26:24 30:10	4:5 25:10 29:16,18
145:23 146:8 147:8	talking	64:17 79:7 152:14	48:11 52:16 71:14
148:12 149:24	23:18,24 26:24 48:8	167:9 241:24	71:15,15 72:12,18
150:14 152:19,25	66:23 110:17,19	263:15 306:3	73:6 76:14 129:21
153:9 155:12	111:13 113:3,10	317:25	135:19 144:15,25
	114:14 126:5	telling	162:10 163:5 165:6
	162:17 164:22	9:11 79:4 183:22	181:9 187:25 188:3

188:4 198:21 220:17 223:20,24 244:16 testify 49:16 50:12 98:21 287:15 319:5 testifying 75:11 194:9 testimony 23:6,11 28:2 29:23 31:7 32:4 58:24 62:22 68:25 70:5 81:4,18 114:13 115:23 122:22 124:20 135:22 137:3,9,13,21,21 138:18 139:16,22 141:20 142:15 145:13,17 146:19 147:2 154:7 157:10 162:3,16 164:3 171:9 174:19 175:5 176:21 178:21 179:6,7 180:8 181:5 182:19,22 183:7 185:10,20 188:23 189:13,19,25 195:14,17,21,22 199:2 201:6 205:7 217:13 225:15 247:4 279:17,25 280:16 282:4 283:23 284:7,21 291:14 310:16 314:2 319:6,10 321:13 testing 57:5 59:20 90:8,10 90:23,25 91:4,11 92:2 117:23 160:16 235:25 244:22 254:20 312:19 318:6 tests 89:12,16 90:2,19 91:8 97:16 98:2,11	98:17 Texas 41:24 text 243:5 thank 13:3 39:16,24 72:20 89:10 182:4 190:5 225:20 242:18 272:19 273:21 317:19 318:9,15 thanks 318:14 thermal 43:21 45:4,11 47:12 74:25 99:6 106:20 106:23 107:15,19 108:7 109:13 112:11 113:22 159:14 193:19 194:11 195:11,25 196:7,8 197:19,21 197:24 216:7,17 223:5 225:21 248:7 248:19,20,22,22,25 249:15,16 266:23 295:25 302:9,16 303:21,24,25 310:20 313:14 thermo 107:16 thermostat 74:7,11,14,16 thick 312:17,22 thickness 312:3 thin 312:25 313:2 thing 90:3 108:23 122:11 136:22 144:12 149:23 164:14 196:9 202:9 207:2 239:25 257:16 277:10 305:19	things 45:14 59:19 66:16,18 91:14 96:19 111:2 114:24 119:23 132:14 148:23 152:8 190:23 191:9 192:18 217:2 221:17 236:3 239:5 252:5 257:17 267:20 274:22 297:10 299:21 302:12 304:15 308:10 think 11:24 24:12 25:10 26:25 27:4 29:17 31:9 32:10,11 41:23 41:24 53:18 70:22 72:16 73:11 74:10 76:3 77:13,14 80:10 82:3 87:6 93:11,13 93:15,24 99:9 108:12 111:7 114:3 120:3,5,21 122:14 125:20 130:23 134:14 136:4,7 139:16 142:7 143:21 145:2 146:11 147:7 148:6 150:13 152:15 153:8 154:6 158:8,9 158:13 160:11 163:7,15,24 164:5 164:13 166:13,14 166:17 167:12,19 179:6 186:16 187:19,21 188:16 189:24 195:12 217:4 220:13 221:12,21 224:8 225:5,6,25 228:4 234:7 247:3 260:21 273:25 276:15 280:2,3 283:13 286:19 288:11 289:4,6 291:3,4,5	292:22,23 294:9 301:18 302:8 307:17,24 310:16 318:3 thinking 58:15 87:4 135:10 297:16 thinks 263:15 287:2 thought 128:10 130:22 179:3 279:18 three 9:19 34:15,23 83:15 83:17 118:6 141:6 141:10,12 158:25 178:15 193:2,10 201:14 202:15 219:24 221:13 222:12 223:13 224:17,18 226:10 257:10 258:10 285:9 314:25 315:3 threw 174:3 throw 43:4 101:19 151:21 180:12,16,20 thrown 174:8 182:12 210:17 till 132:7 154:17,19 time 1:15 3:22 9:6 13:3,17 13:22 17:21 19:25 29:19 38:4 48:19 63:19,24 66:12,13 66:15 67:10 68:5 82:23 93:21 94:8 95:2,9,10 104:17,18 108:16,16,21 116:17 119:2,18 120:10 121:2 129:20 130:11 133:23 135:7 137:5 140:23 142:17,18
---	---	--	---

143:22 144:2 145:16 151:18,23 152:2,3,19 153:9 157:2,25 158:15 163:23 165:25 166:25 167:3,19 170:9 174:17 180:21 181:15,20 181:23 186:12 187:7 194:2,7,23 196:9,25 197:2,25 198:10,12 199:14 199:24 209:2 213:5 216:17 220:8 224:24 233:18 235:14 246:15,21 250:22 260:10 264:21 267:23 274:18 276:2 282:15,15,24 283:20 284:6 286:21,22 287:8,12 287:18,19 288:14 288:14,17 289:2,6 290:4,25 291:6,22 292:9,23,24 294:4,4 295:6,10 303:15 304:6 307:8,15 314:5 319:10 timeline 143:13,15 244:3 294:25 timer 204:25 205:5,8 times 6:5,8,19 43:13 159:25 178:15,19 196:24 198:9 252:19 254:6 272:19 273:4 277:9 294:6 timing 149:6 215:15 216:20 tip 105:8 149:24 208:21 tip-over	105:8 toaster 199:11,13,23 200:6,9 201:13,15,21,23 202:12,14,24 203:4 204:6 205:23 267:5 today 5:3,4 6:19 12:15 22:17 39:10 59:17 62:22 66:13 77:22 84:24 94:25 225:8 317:22 318:7 today's 9:15 told 11:14,15 45:14 49:17 77:14 85:20 144:20 149:7 169:2 185:17 190:10 204:20 264:5 293:14 tools 251:16 top 68:18 82:14 118:2,4 168:3 179:22 207:20,21 229:25 231:4 237:17 240:12 241:23 246:2 297:13 298:18 299:5,11,21 300:2,5,16 topic 272:17 torpedo 73:14,16,24 74:8,18 81:8 tossing 43:14 tot 281:20 total 35:24 80:7 141:11,12 totality 111:17 218:6 309:8 totally 10:17 111:3 176:16	302:4 totes 66:18 touch 189:11 touched 306:14,21,22 touching 223:6 tough 133:24 towels 238:20,25 239:11,24 240:5,10,20,25 241:12 247:7 269:16 trace 220:19 221:6,9,9,19 traced 88:23 222:12 223:11 tracers 221:11,13 trailer 245:20,21 training 39:2 68:21 246:3 294:16 trainings 149:13 246:24 trampled 308:19 transcript 6:20 7:3 23:6,14 319:9,9 transcripts 25:2 transfer 192:23 193:2,3,9 313:15,15 transferred 36:15 193:12 travel 67:4,8 150:20 151:23 192:5 289:10 traveled 276:21	traveling 318:11 treatise 56:3,10 trial 3:22 triangle 113:3 115:8 tried 130:20 167:20 189:7 221:6,9,12 293:3 trigger 107:9 150:17 trim 201:18 trip 220:19 222:2 223:4,5 223:7,7,9,20 224:3 258:9,10 tripped 88:24 145:12 219:23 220:21 222:10,15 223:4,17 232:25 234:24 tripping 234:21 trouble 230:22 troubles 31:24 true 124:5,8 179:8 208:11 285:5 319:9 321:12 Trump 60:23 truth 262:2 319:5 try 20:11 43:7 83:9 103:14,15 104:9 105:21 126:20 162:23 163:12,23 272:22 273:23 277:17 282:25 trying 7:8 58:11,12 84:9
---	--	--	--

126:15 146:5 149:6 150:10 152:15 162:5 176:9 177:24 178:5 179:5 180:22 182:5 191:3 216:20 219:2 221:12 232:6 236:13 242:25 243:14 253:6 261:14 267:17 272:10 290:16,18 316:6	32:24 48:23 101:14 133:22 151:4,5 201:12 209:15 246:21 typically 15:8 20:22 21:3 42:15 79:16 101:17 156:18 235:24 236:6 244:18,19 245:2 246:4 269:5	149:4 150:10,11 152:12 154:6 161:10 172:10 179:5 181:14 186:11 217:3,4 223:25 232:4 233:21 234:14 248:3,21 261:13,15 277:19 302:10 307:3	201:9 221:17 unplugged 199:14,25 201:2 202:2,8,10 unsigned 3:14 untestable 271:9 updated 68:7,18 updates 68:19 upper 166:10 206:17 upside 149:24 upstairs 121:3 upstate 35:20 39:13 46:2 287:9
turn 11:9 40:2 74:15 83:6 201:9 242:23 264:17 272:21 273:18 297:2 318:12	U U 3:2 UL 96:12,15,20 97:2,11 97:17 98:3,10	understanding 14:24 15:3 16:18 32:15 68:2 72:22 78:25 97:18,23 98:2 142:4 147:2 170:20	urine 148:22 USB 71:12 use 7:21 14:7,14 15:3 31:5 48:12 55:9,10 55:14,14,15,15,16 55:17 56:13 58:9,16 99:25 104:17,18 106:24 107:14 108:9,11 109:4,11 115:24 116:6,12,13 116:14 118:17,21 118:25 124:10,15 124:16 125:16,18 146:6 159:6 163:11 164:9 187:20 189:7 190:19 193:10 198:17 221:12,12 233:18 238:6 249:11,12,23 251:12,16,20 266:14 271:23 275:19
turned 214:11	ultimately 171:13	understood 14:8,15 25:24 26:14 29:14 45:6 53:9 59:11 69:21 75:13 125:2 128:4 246:25 317:21	
turning 67:18 135:14 175:10 276:20	unable 132:15 188:5 221:19 286:8	undertake 130:17 132:3	
TV 264:15	unartfully 16:25	undertaken 234:3	
two 26:9 39:11 66:3 79:14,24 99:24 110:18,25 111:3 115:14 131:13 136:8 139:8,18 141:8 142:16,21,24 144:16 149:8 150:12,14,15 155:7 165:3 168:11 173:20,24 174:5 175:14 186:20 187:5 197:7 200:16 216:8 221:13 223:20 226:22 229:10 231:17 258:10 285:8 291:8 299:12 312:9 314:25 315:3	unattended 74:19 unauthorized 92:22 unburned 298:3 understand 231:15 undercharge 109:12 undercharging 106:25 107:13 underneath 297:8 underside 214:21 understand 5:3 8:23,25 9:3 16:12 21:12 24:18 27:13 27:14 55:25 58:23 84:16,21 93:19 116:9 119:5 144:6	undertook 305:3 underwrite 36:3 Underwriters 96:16 uniform 301:7 302:4 uniformity 301:16 unit 73:19 74:13,14 96:10 156:17 214:14,15 227:16 United 1:2 39:6 96:17 University 36:14,16 unmade 267:3 unplug	
type 250:7 314:3			
typical			

uses 164:8	verbal 8:17	W	306:12 315:5 317:24
usually 117:24 201:13 244:19	verified 27:7	waft 152:20,21	wanted 18:6,14 19:8,16 20:3 64:20 265:13,14,15 276:14 297:23 300:9 312:20
utilize 35:12,13 57:24	verify 64:20	waited 88:6	
utilized 50:20 266:20 313:21	verses 16:20	waiting 82:9	
utilizing 59:12 73:21 313:25	version 62:18 68:7	waived 3:9	wants 260:13
UV 231:23	versus 20:25 69:9,11,17	wake 204:25 205:10	warned 50:23 51:11
V	vertical 206:21 207:6,9,13,16 208:22 231:15 296:11 298:21 299:13	waking 136:23 147:5 289:17	warning 50:8 51:7,25
Vaca 232:21	vertically 208:11 296:4,7,22	walk 74:9 119:21 139:12 164:8 277:15 282:2 285:8 291:10 292:12,21 294:19	warnings 48:8,16,21 49:3,11 49:14,15,16,18,19 50:2,5,6,9,13,19,21 51:2,4,13,21 74:4
vacant 284:4	victim 214:25 215:9,12,21 216:5	walked 174:9	warrant 234:5
vacuum 30:3,25 33:12 218:18 253:24	video 43:8 77:4	walker 164:7,8	wasn't 21:23 30:16 31:19 32:3 33:3 51:11 74:25 116:15 117:15 121:7 125:16 130:23 131:12,18 133:18 146:4 188:21 216:13 221:8 237:4 251:12,23 254:8 259:25 261:21 265:11 276:4 277:9 277:15 279:14 280:12,14 293:5
value 305:19	view 143:19 168:18 184:25 254:10 269:10	walking 231:7 277:16 308:9	watch 264:16 314:18
variable 248:19	VIRTUAL 1:18	wall 136:9,10,13 138:22 139:13 143:3 183:17 201:3 212:17 278:11,14 278:16,18,22 279:5 279:5 285:9 297:5 300:25	water 47:8 149:21 197:10 197:12
various 29:9 62:17 109:10 247:11 295:21	visible 212:14,19,21	Wanemaker 2:15 39:19,24	way 32:19,20 50:3 56:15 79:9 86:17 118:2 129:13 152:16 153:7 156:20 157:18 171:16 191:2 198:17
vector 259:14,16,20 260:5 260:17 261:5,8	visited 129:23	want 5:18 26:23 33:9,15 49:5 55:11 59:8,10 59:25 118:3 166:16 190:25 203:16 232:24 238:6 242:10 244:25 255:16 262:5 266:13 273:6,12,22 273:23 301:17 302:13 304:3	
vehicle 60:14,16,23,25 72:11 81:9 189:9	visual 178:5		
vehicles 60:19,19 61:2	visually 195:9 238:9 278:22		
vent 142:12 150:7 154:19	voltage 91:13 98:5		
vented 160:4,14 310:3	volume 242:23		
ventilation 150:2 155:8 245:18 278:13 298:12	volunteer 295:7		
venting 112:13 311:16	vouchered 304:21,22		

204:11 225:6 229:7 231:18 236:12 237:14,16 244:11 248:2 261:22 264:3 268:3 273:20 277:21 282:2,17 287:11 288:22 290:14 291:9,23 302:23 305:24 321:17 ways 106:22 107:15 227:21 we'll 67:17 68:12 87:14 313:18 we're 5:3,13 7:20,22 8:10 15:8 32:25,25 47:3 47:3 55:11,12 58:2 58:3,3 59:18,19,19 60:20 61:16,19 66:23 69:16,24 71:22,23 90:7 105:11 110:16,19 111:13 113:3 126:20 161:19 178:25 191:9 197:5 208:15 218:9 226:21 245:12 247:5 255:7 285:4 286:24 308:16,17 308:25 we've 23:18,24 65:3 66:3 82:24 97:3 117:23 149:15 160:16 167:19 168:15 181:10 185:13 235:25 250:12 253:2 262:19 318:7 wear 230:25,25 weather 44:22 45:22 website	124:25 128:22 week 68:10 77:10 weekly 76:12,18 103:19 weighed 173:16,18 went 11:17 21:3 36:14 80:21 88:4,17 112:15 113:22 124:24 137:5 144:21 145:18 146:20,21 154:2 163:22 182:18 183:5 185:25 187:20 203:24 204:16 209:24 221:5,20 222:12,20 222:21,23 251:21 251:25 278:12 279:20 281:4 282:8 282:16 283:23,24 283:25 284:5 286:21 287:16,21 287:22 288:14 289:25 291:23 292:9,9 weren't 7:16 18:5,17 42:7 46:11 93:11 96:8 105:14 120:6 143:11,23 153:17 155:23 156:15 188:22 196:15 227:18 246:19 266:17 274:24 277:4 293:17 296:24 297:11 west 39:12 58:2 WESTERN 1:2 whatever's 44:23 whatsoever	92:2 122:25 wheelchair 173:3 177:2 when's 120:25 WHEREOF 321:19 white 41:4,8,13 170:25 171:18 wicks 117:21 118:6 wide 299:6 wife 141:22 wild 55:23 107:18,21 wind 107:18,21 winded 232:3 window 151:21 156:16 180:14 windows 156:12,15 207:19 245:19 winter 287:9 witness 3:10,16,18 4:3 5:17 5:23 23:2 24:25 25:8 31:18 115:15 127:15 133:23,25 138:3,8 165:23 166:4,5,19 167:11 168:12,15,20,24 169:13,13,22 170:25 171:12 175:2 181:4 184:2 196:20,24 210:2 232:2 257:11 263:18 265:19 267:4 268:12 269:22 270:5	318:22 321:10,13 321:19 witness' 120:16 witnessed 194:15 witnesses 193:21 198:9 woke 135:25 148:11 150:22 174:21 181:25 182:6 183:14,23 187:8,9 205:6 282:6 wonderful 87:8 wood 201:18 211:2 297:25 301:11 word 31:4 56:4 58:12 94:6 124:15 146:6 159:7 161:14 243:16 249:13 wording 58:5 words 16:2 work 22:13,15 60:11 61:9 65:25 69:17,17,18 69:25 70:2 76:8 79:11,13,15 84:4,12 102:6 186:3 worked 33:22,24 36:2 38:21 40:4,9,12 60:9 78:11 79:18,23 81:22 264:6 268:24 working 59:18 141:8 234:10 works 107:9 world 86:23 worries
---	---	--	--

12:24	238:19,22 239:11,24	269:8	11
worse	240:6,20 247:8	yes/	123:18 138:14
157:13,22	yeah	92:6	1100
would've	6:13,14,16 13:2 28:5	yesterday	2:8
220:21	29:24 33:11 34:5	60:9,14 68:8,14	115
wouldn't	43:3,17 45:13 48:20	York	189:13
31:3,16 32:2,16 55:7	58:17 62:15 63:18	1:2,23 2:8 4:5,14	12
59:7,8 67:14 75:10	63:21 64:7,16,23	35:20 39:14 41:23	35:9 138:6 140:9
122:8 134:10	66:18,22 70:20,21	46:2 72:12 87:6	244:20,20,23,23
141:22 142:16,23	71:14,22 72:8 75:14	89:7 287:9 321:4,8	124
149:7 158:22	80:2 86:19 87:2,6	YouTube	136:15
169:19,25 170:10	90:2 95:23 107:24	264:15,16 314:18	13
171:21,25 172:8	109:14,16 110:2	Yup	127:5 129:9 140:10
186:3 188:10	115:7 116:11	190:7 206:11	1321
214:24 215:6	117:21,21 120:9		53:15
222:22 227:9	121:9 127:24 128:9	Z	14
243:14 278:5 288:5	128:12 137:18	zoom	19:10 63:9 64:13
288:5 292:5 294:18	139:5 140:8 142:20	5:12 7:20 115:11	65:3 68:3 138:11
296:9 309:14	143:5 149:4 157:4	297:3	14443
wow	157:20 159:16,17		252:18
13:2 87:9	161:5 164:25 165:3	0	1450
write	165:14 174:4	02110	2:12
25:20	179:20 192:21	2:12	14555
written	200:23 208:14		4:14
41:2,5,8,11 75:8,11	211:2,12,12 233:21	1	14614
76:14	237:13 238:4 243:4	1	2:8
wrong	248:24 249:10	3:17 63:8,11 64:2	14th
201:7,8 209:21	254:18 256:10	65:3 66:3 67:18	68:20
251:16	257:14 263:10	82:17 86:10 135:15	15
wrote	264:15,18 267:25	307:7	123:21 124:20 130:2
61:10 68:5	274:6 276:24	1,000	155:21 157:3
	279:24 281:21,23	276:10	16
X	283:22 284:19	1,200	119:7 138:11
1:3,12 320:2,13	288:2,10 294:9	76:10	160
X-ray	295:5 296:6 297:8	1:21-cv-00704-JLS	137:13,14,20
102:20 229:5 232:23	303:5,10 306:11,19	1:9	161
232:24 305:9,10,13	307:3 312:15 313:3	10	137:13,15
305:25	316:16,19	138:6 244:20,20	1650s
X-rays	year	10:08	305:14
14:23 34:4 35:13	36:15 38:14 60:4	1:15	17
90:22,24 91:3,8	76:11 79:13,24	100	119:9
104:3	121:4 128:13 287:8	47:7 97:8	175
	years	1000F	2:12
Y	38:11 59:17 79:12,25	112:20	18
yarn	80:4,6 100:8 134:9	1033	129:10,11,12,15
	182:5 184:4 246:24	55:16 110:9	138:15 295:4,5

303:18 304:10,19 306:10,16 308:25 309:18 311:19 313:13 18650 73:17 99:5 159:14 248:9 302:16 18650s 73:21 187 174:19 175:5 19 119:7,9 129:11,12,16 191 162:18 1911 249:25 19421 257:9 19443 252:15 254:6 255:19 1965 270:19 271:22 1990 134:6 183:21 1991 134:5 19921 261:6 1995 38:17 1998 38:20,21	319:19 200 173:16 197:14 2008 38:22 2010 85:21 99:13 123:14 184:14 2014 38:23 39:9 2015 123:10,15 128:15,16 184:15 2020 4:23 5:6 67:10 78:16 80:4 86:15 93:4,18 148:11 210:7 289:18 2024 63:9 2025 1:14 321:20 20th 182:3,4 21 130:3 157:10 279:25 280:18 287:21 2100 303:18 212 197:11,13 22 126:25 127:11 128:15 23 17:12 160:19,21 161:19 24 4:23 5:6 17:12 19:10 64:13 65:4,13,17,23 68:4 77:16 148:11 24th 182:3,4,7 289:18 27 1:14 86:15 93:18 191:10	28 2:8 199:6 29 60:10 147:4 2nd 321:20 <hr/> 3 <hr/> 3 46:5 30 3:16 39:6 206:8 300F 99:8 31 65:13,16,23 160:21 33 209:5 35 212:25 218:23,23 350 203:15 36 171:7 218:23 219:21 37 191:11 193:18 194:10 195:24 38 199:6 3D 90:15,17 91:7 <hr/> 4 <hr/> 4 4:13 197:21 205:10 276:20 285:23 4.5 245:13 4:00 183:2 205:16 40 70:2 400 203:15 41 225:13	423 168:11,12 169:14 424 168:11 169:14 43 300:10,12,13,25 45 39:15 155:22 157:3 212:2 235:4 450 203:16 46 211:20 250:2 256:18 47 83:6 84:2,6,13 212:8 256:19 262:15 48 84:2,6,14 49 226:15 <hr/> 5 <hr/> 5 115:22 116:11 118:10 119:6 137:22 138:4 171:4 245:13 285:25 286:13,17 5/21 71:2 5:26 318:21 5:30 317:14 50 6:9,10,15 39:15 78:18,21 86:6,11 500F 99:8 51 67:19,24 53 68:23 70:17 81:4 54 68:25 70:14,16,18 81:4
---	---	--	--

56 225:13	137:22 138:4		
57 226:25	90 46:3,23 82:25 296:12		
58 214:22 215:8	900 76:10		
59 228:9 229:4,11	911 162:8 164:16 166:23 187:12,21 189:11 191:2 216:22 295:2		
<hr/> 6 <hr/>	921 53:13,25 54:5 55:16 55:19 56:22 57:3,7 57:21 58:19 60:6 61:22 110:9 115:6 258:7 301:17		
6 62:10 115:10,21,22 116:12 136:16 286:5,13,15	921643 206:9		
6.5.7 301:18	95 47:6		
60 69:25 229:4,11,15 230:3 317:11,16			
60/40 69:16			
61 316:18			
63 232:20 320:8			
64 68:2 232:20			
65 320:9			
<hr/> 7 <hr/>			
7 17:12 295:19			
700 226:23			
7317 4:13			
<hr/> 8 <hr/>			
8 253:3			
<hr/> 9 <hr/>			
9 17:12 121:11 126:25 127:11 129:17			